



Using
Harvard
Graphics®
4.0 ■ for Windows® 95
and Harvard® F/X™

Using Harvard Graphics 4.0

for Windows 95

and Harvard F/X

Part Number 16-040-10

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Look for tables marked by the Help symbol to find online Help step-by-step instructions for completing tasks described in the print information.



For online Help about:

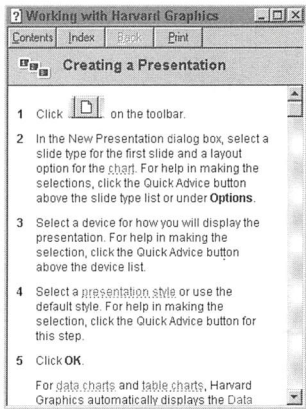
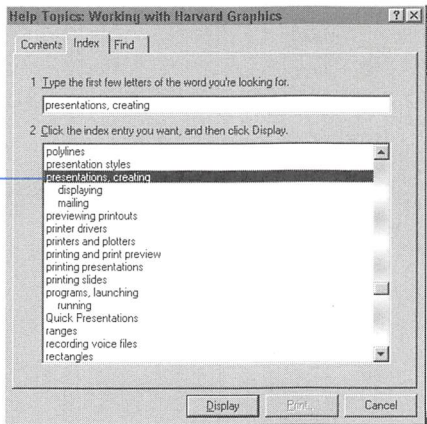
Click this index entry on the Help Index tab:

Creating a presentation

presentations, creating

To find an online Help topic, click the Help menu, then click **Harvard Graphics Help**. Click the **Index** tab of the **Help Topics** tabbed dialog box. Type the index entry in the **Type the first few letters of the word you're looking for** field or click it in the list.

Clicking this index entry displays online Help about the topic



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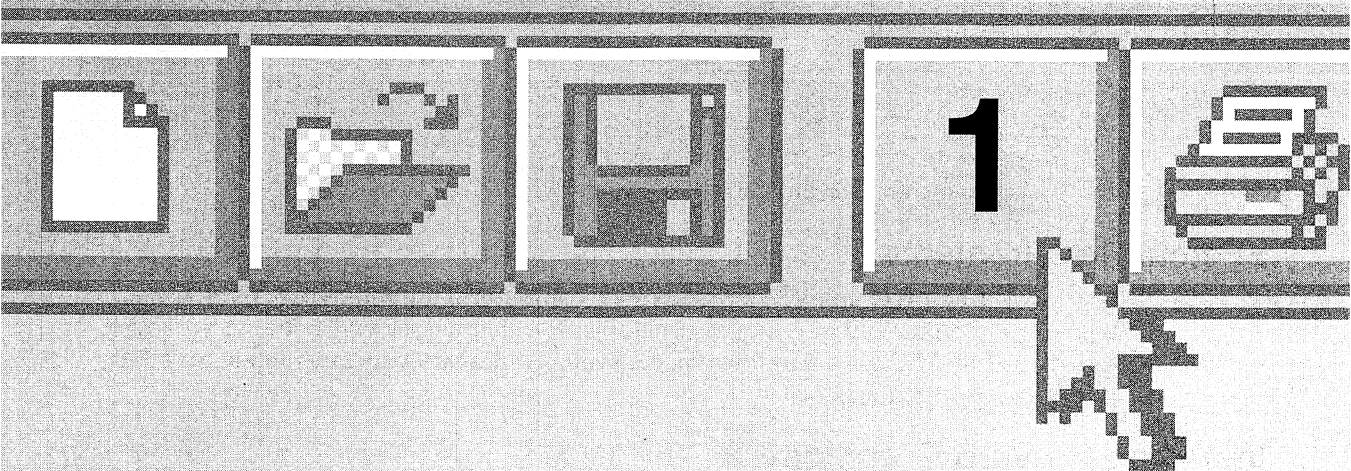
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Index



Installing Harvard Graphics

This Chapter Shows You How To:

- ◆ Install Harvard Graphics (page 1-2)
- ◆ Install additional files after a compact install (page 1-3)
- ◆ Uninstall Harvard Graphics (page 1-3)

To install Harvard Graphics on a network, see Appendix A.

System Requirements

Required: an IBM-compatible 486 computer, a minimum of 8 MB RAM, a monitor and graphics card set up in 256 color Super VGA. The system must run Microsoft Windows 95. (See your Windows 95 documentation for other requirements.)

Installing Harvard Graphics

- 1 Insert Disk 1 into drive A.
- 2 In Windows 95, click the **Start** button, then click **Run**. Type **a:setup** in the Open list and click **OK**.
- 3 Follow the instructions on the screen.
- 4 Enter a path to install Harvard Graphics in the Choose Destination Location dialog box. The default path is C:\HWG.
If you have a previous version of Harvard Graphics installed in C:\HWG, you must install Harvard Graphics 4.0 in a different path, for example, C:\HWG4.
- 5 You can register your copy of Harvard Graphics online. Follow the instructions on the screen.

You can choose to install a typical, compact, or custom package. A typical install includes all Harvard Graphics options and is recommended for most users.

A compact install doesn't include:

- ◆ All presentation styles and palettes. Only the default presentation style and palette and the MONOW.PL palette are installed
- ◆ Quick Presentations
- ◆ 5-Minute Coach tutorial
- ◆ Quick View
- ◆ Harvard F/X
- ◆ Harvard Montage Lite and clip art albums
- ◆ Animation Player and animation movie clips
- ◆ Video Player
- ◆ These filters: Corel Draw .CDR, Micrografx .DRW, Kodak Photo CD .PCD, Macintosh .PCT, and WordPerfect .WPG.

If you choose a compact install, you can add one or more of these components later, using a custom install.

**Note**

- ◆ Before installing Harvard Graphics, unload any memory-resident virus-checking software (such as Vsafe or Norton Anti-Virus) or any virus protection built into the system BIOS. See your virus-checking software documentation for more information. When the installation of Harvard Graphics is complete, you can reload the virus-checker.

Upgrading from an Earlier Version

If you're upgrading from an earlier version of Harvard Graphics for Windows, the Remove Old Version dialog box appears and removes all old files, including presentation style (*.STY) and palette (*.PL) files installed with the earlier version.

**Note**

- ◆ Files you've created aren't deleted, as long as you saved them with names that are different from files installed with Harvard Graphics.

Installing Additional Files after a Compact Install

- 1 In the Harvard Graphics 4.0 Installation dialog box, click **Custom**. In the Select Options dialog box, select each additional component you want to install.
- 2 When you finish, click **Next** to install the components you selected.

Uninstalling Harvard Graphics 4.0

Double-click **Add/Remove Programs** in the Windows Control Panel, then select Harvard Graphics 4.0 from the list on the **Install/Uninstall** tab of the Add/Remove Programs Properties dialog box. Click **Add/Remove** to uninstall Harvard Graphics 4.0.

**Notes**

- ◆ Uninstall doesn't delete files you've created, as long as you saved them with names that are different from files installed with Harvard Graphics.
- ◆ Uninstall doesn't remove a folder on a network drive or one currently open in Windows Explorer.

The Basics

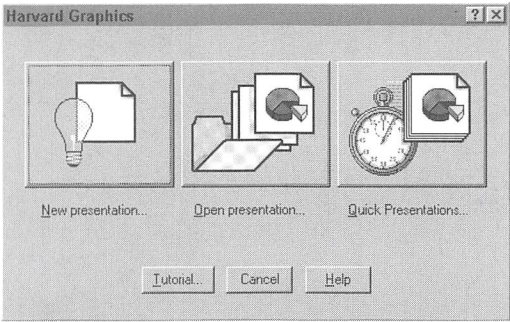
This Chapter Describes:

- ◆ Starting Harvard Graphics (page 2-2)
- ◆ Creating a presentation (page 2-3)
- ◆ Using the three Harvard Graphics views (page 2-6)
- ◆ Using toolbars (page 2-7)
- ◆ Using the Outliner to organize your presentation (page 2-9)
- ◆ Using the Slide Sorter to arrange slides (page 2-10)
- ◆ Printing and displaying a presentation (page 2-11)
- ◆ Customizing Harvard Graphics (page 2-12)

Starting Harvard Graphics



- 1 In Windows, click the **Start** button then click the **Harvard Graphics 4.0** icon in the Harvard Graphics programs folder.
- 2 Click an option in the Harvard Graphics opening dialog box.



If you want to:	Click:
Learn or review the fundamentals of Harvard Graphics	Tutorial
Open an existing presentation	Open presentation
Create a presentation	New presentation
Use one of the predesigned business presentations that are installed with Harvard Graphics (in a typical install)	Quick Presentations

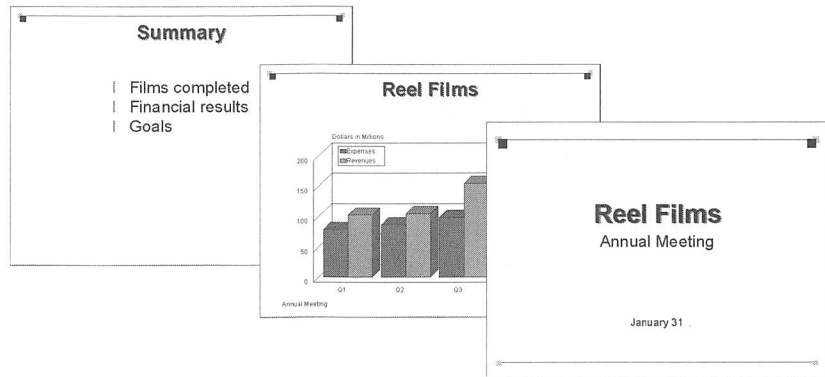
You can use parameters when you start Harvard Graphics from a shortcut icon or when you click the Windows 95 **Start** button and click **Run**. The parameters specify how Harvard Graphics opens; for example, with an existing presentation in read-only mode, or as a new presentation.



For online Help about:	Click this index entry on the Help Index tab:
Using parameters to start Harvard Graphics	parameters, starting Harvard Graphics

Creating a Presentation

When you work in Harvard Graphics, you create a *presentation*. A presentation contains one or more *slides* (up to 400). A slide can contain *text charts* (such as bullet charts), *data charts* (such as bar charts) as well as other objects.



Use text charts when you want to primarily display text; for example, a title chart that introduces your presentation or a list of the topics you plan to cover.

Use data charts when you want to graphically represent data; for example, yearly revenues, or quarterly sales figures as a percent of the total for the year.



You can choose from the predesigned text and data chart types and styles that come with Harvard Graphics, or create your own.

To begin working in Harvard Graphics, follow these basic steps:



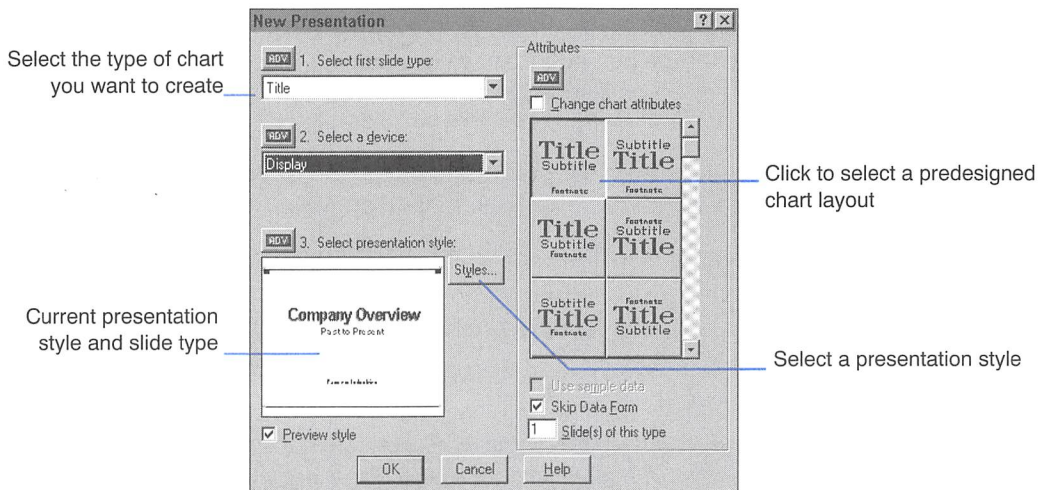
- 1 Click **New presentation** in the Harvard Graphics opening dialog box or on the File menu, or click the button on the toolbar.
- 2 In the New Presentation dialog box, click a slide type and the output device you'll use.

*Select an output device that matches how you'll display or print the presentation. Although you can change the device later by clicking **Print Setup** on the File menu, the appearance of slides might change if you do.*

- 3 Select a presentation style and click **OK**.
- 4 Enter data for the chart you're creating.
For data and table charts, use the Data Form. For title, bullet, and organization charts, enter text directly on a slide or use the Data Form.
- 5 Add finishing touches (graphics and enhancements) to the slide in the Slide Editor.
- 6 Add other slides.
- 7 Arrange slides in your presentation in the Slide Sorter.
- 8 Print your presentation or display it as a ScreenShow.
-  9 After you finish your presentation, click **Save** on the File menu or click the button. Type a filename, and click **OK**. Harvard Graphics saves the file with a .PR4 extension.
-  10 To close the presentation, click **Close** on the File menu or click the button. To exit Harvard Graphics, click **Exit** on the File menu.

See the following sections for more information on these steps.

Selecting a Slide Type and Presentation Style



Select one of the 31 Harvard Graphics *presentation styles* to give a consistent look and feel to all slides in a presentation. See page 9-2 “Working with Presentation Styles.”



For online Help about:

Click this index entry on the Help Index tab:

Creating a presentation	presentations, creating
Creating a title chart	title charts
Creating a bullet chart	bullet charts
Creating a table chart	table charts
Creating a free-form chart	free-form charts
Creating an organization chart	organization charts
Creating a pie chart	pie charts
Creating an XY chart	XY charts

Entering Data

When you create a slide with a pie, table, organization, or XY chart (for example, a horizontal or vertical bar chart, line chart, area chart), by default Harvard Graphics displays a Data Form for entering the data. Harvard Graphics changes the data that you enter in the Data Form to the pies, bars, and lines you see in the finished chart.

Shows where data that you enter appears

Labels and data have been entered

Enter optional titles or footnotes in this part of the form

Click to import data from another file

	A	B	C	D	E
	Pie1 Labels	Pie1 Values	Pie2 Labels	Pie2 Values	Pie3 Labels
1	01		102		
2	02		65		
3	03		27		
4	04		150		
5					
6					
7					
8					
9					
10					

This Data Form is for pie chart data; other chart types have different Data Forms

You can type data, import, or drag and drop data to a Data Form or link to data in another file using DDE. When you finish entering data, click **OK** in the Data Form to see your chart in the Slide Editor. See page 6-2 “Importing Spreadsheet and Delimited ASCII Data” and page 7-2 “Using Dynamic Data Exchange (DDE).”

**Note**

- ◆ For title, bullet, and drawing charts, Harvard Graphics skips the Data Form by default so you can create a chart directly on the slide.

**For online Help about:**

Click this index entry on the Help Index tab:

Entering data in the Data Form

Data Form

Importing data

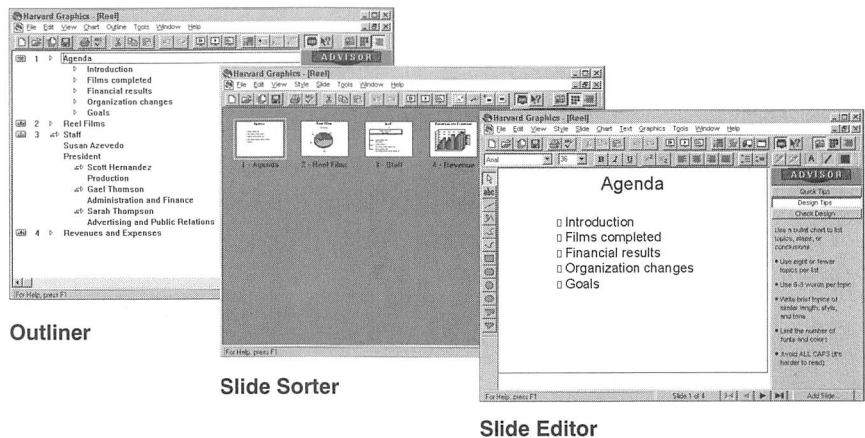
importing data

Linking data (using data from another program)

linking data

Working with Harvard Graphics Views

Harvard Graphics provides three *views* of your presentation. The views display the same presentation in different ways.



Outliner

Slide Sorter

Slide Editor

Use the Slide Editor to change the appearance of individual slides in your presentation, add text and objects, and set options for how each slide displays in the finished presentation. The Slide Editor displays one slide at a time. You can edit any text or data chart in the Slide Editor.

Use the Slide Sorter to see thumbnail views of all the slides in your presentation and set the order in which they display in the presentation.

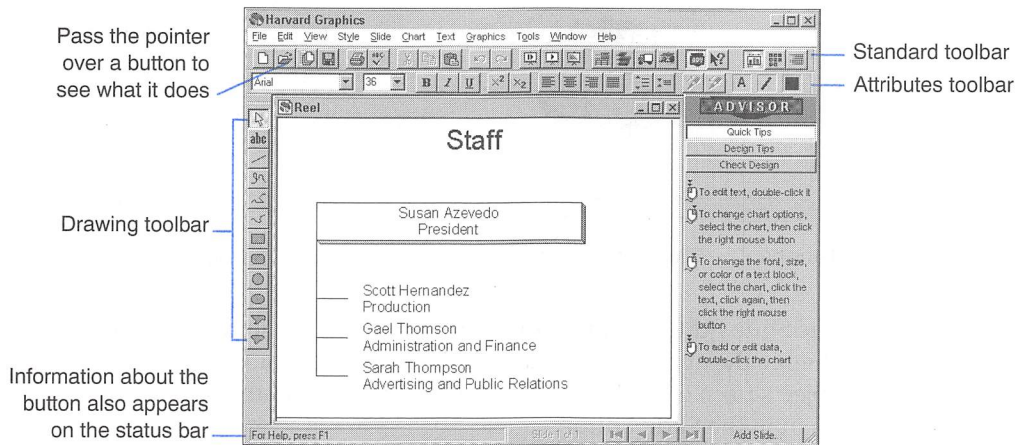
Use the Outliner to see an outline of all the slides in your presentation and to edit text charts, for example, organization charts and bullet charts. The outline lists the titles of all slides in your presentation.



You switch between views of your presentation by selecting options on the View menu or clicking buttons on the toolbar.

Using Toolbars

A standard toolbar appears across the top of the current Harvard Graphics window in the Slide Sorter, Outliner, Slide Editor, and Data Form. In addition to the standard toolbar, you can display the Attributes and Drawing toolbars in the Slide Editor. The Drawing toolbar contains buttons for creating objects and text. The Attributes toolbar contains buttons for setting the attributes of objects and text, such as fill color or text size.



You can show buttons on toolbars in a large format for improved legibility. You can also reposition a toolbar by selecting and dragging it to anywhere in the current window (to select, click on any area of the toolbar other than a button).



Note

- ◆ For a list of all buttons in Harvard Graphics, see the quick reference information on the back cover of this guide.



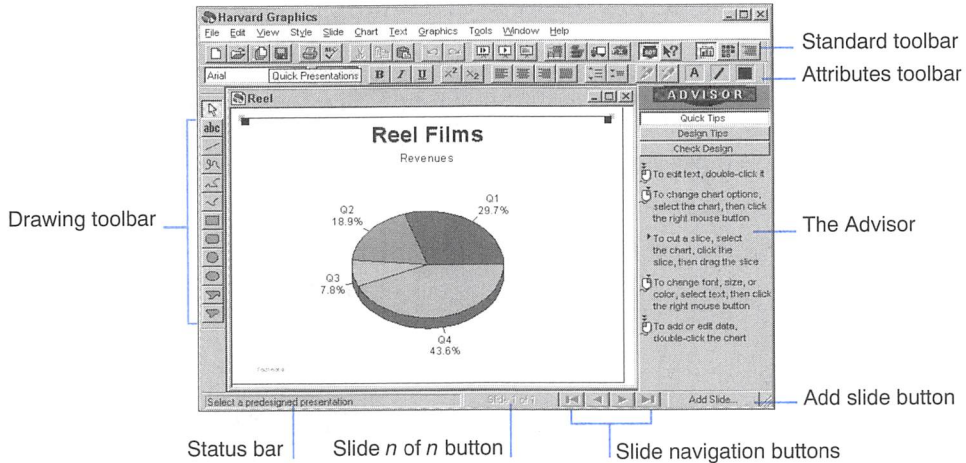
For online Help about:

Customizing the standard toolbar

Click this index entry on the Help Index tab:

toolbars

Adding Finishing Touches in the Slide Editor



The Slide Editor displays one slide at a time. In the Slide Editor, you can change the appearance of a slide. You can paste or drag charts, text, and objects from other Harvard Graphics views and other applications and edit them in the Slide Editor.



You can switch to the Slide Editor from any view. Click **Slide Editor** on the View menu or click the button on the toolbar.

Adding More Slides



Add slides in the Slide Editor or Slide Sorter by clicking the **Add Slide** button, clicking **Add Slide** at the bottom of the screen, or clicking **Add Slide** on the Slide menu. Choose a slide type, and add text or data.



For online Help about:

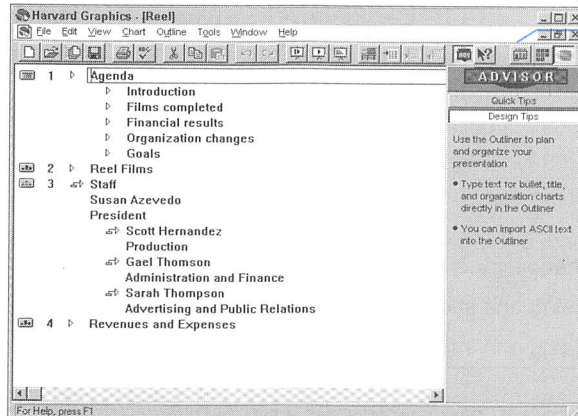
Adding a slide to a presentation

Click this index entry on the Help Index tab:

adding slides

Organizing Your Presentation in the Outliner

The Outliner is the best place to plan and organize a presentation, especially if it consists mainly of text charts. You can create and edit bullet, organization, and title charts by typing the text directly in the Outliner.



Click to switch to the Slide Editor or Slide Sorter

In the Outliner, you can type slide titles, organization chart positions, and bullets



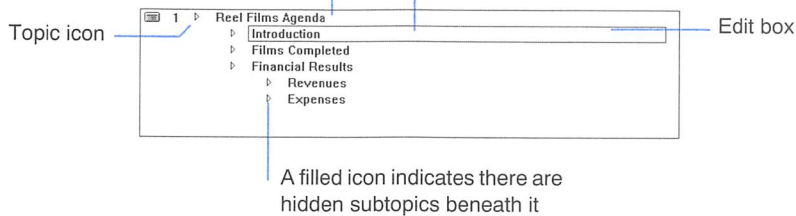
To display the Outliner: open an existing presentation or create a new one. Click **Outliner** on the View menu or click the button on the toolbar.

Editing Text in the Outliner


Click anywhere on the topic text. An edit box appears around the text and a cursor appears where you clicked. You can edit the text or perform other functions, such as hiding a job title in an organization chart or changing the level of a topic in a bullet chart.

A *topic* is any slide title, bullet in a bullet chart, or position in an organization chart

A *subtopic* is a bullet in a bullet chart or position in an organization chart that's a lower level than the topic above it



Clicking to the left of a topic’s icon selects it. If a selected position has subtopics, they are automatically selected. You can move, copy, cut, and paste selected topics and subtopics.

	For online Help about:	Click this index entry on the Help Index tab:
	Displaying the Outliner Editing in the Outliner	Outliner
	Moving a bullet Changing the level of a bullet	moving bullets
	Hiding and showing bullets	hiding bullets
	Moving a position Changing the level of a position	moving organization chart boxes
	Hiding and showing job titles	job titles
	Hiding and showing subordinates	hiding organization chart levels

Arranging Slides in the Slide Sorter

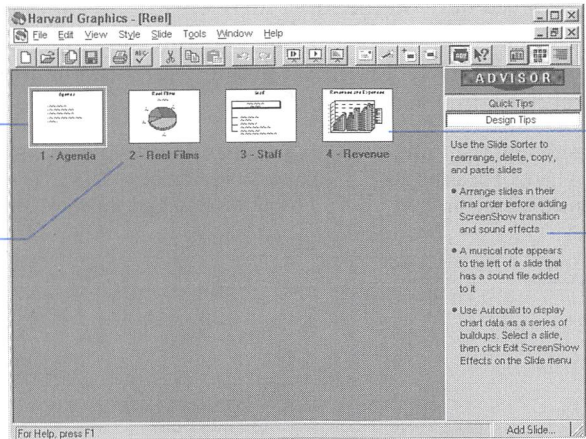
You get an overview of an entire presentation in the Slide Sorter. Use the Slide Sorter to arrange the order of slides in the presentation, delete entire slides, or copy slides from other presentations or products.



To display the Slide Sorter: open a presentation or create a new one. Click **Slide Sorter** on the View menu or click the button on the toolbar.

Select and drag slides where you want them

Slide number



Double-click a slide to see it in the Slide Editor

Show the Advisor to see tips about working in the Slide Sorter

Deleting, Copying, and Pasting Slides

Select one or more slides and then use the Edit menu to cut or copy slides. You can also drag slides between the Slide Sorters of two open presentations. Once you paste or drag slides into the Slide Sorter, you can work with them like any other slides.

Click **Add Slide** or **Delete Slide** from the Slide menu to add or delete a slide.

If you have an entire Harvard Graphics presentation (with the file extension .PRS or .PR4) to copy, drag it from Windows Explorer to Harvard Graphics. The first slide of the presentation displays in the Slide Editor. Use the Slide Editor navigation buttons to view other slides in the presentation.



Note

- ◆ You can cut, copy and paste, or drag files one at a time from the Slide Sorter into another application. You might have a choice of formats for pasting the Harvard Graphics slide, for example Bitmap or Picture.



For online Help about:

Click this index entry on the Help Index tab:

Organizing slides in a presentation

Slide Sorter

Embedding slides in another program

embedding slides

Printing a Presentation

You can print an entire presentation or selected slides as slides, handouts, or speaker notes. You can also print slides as overhead transparencies or 35 mm slides. To see how a slide will print on a black and white printer, click **B&W Preview** on the View menu. See page 11-1 "Printing" and page 11-5 "Previewing a Printout."

Displaying a Presentation

You can display a presentation on a computer screen one slide at a time in a *ScreenShow*. After displaying the last slide in a ScreenShow, press Esc to return to the view where you were when you started the show. See page 10-2 "Starting a ScreenShow."

Customizing Harvard Graphics

Customize Harvard Graphics by clicking **Options** on the Tools menu, then clicking tabs on the Options dialog box.

- ◆ Presentation files (data files) are opened from and saved to \HGW\PRES if you use the default installation options. To change this default presentation directory, click the **Paths** tab and type the path you want.
- ◆ Harvard Graphics opens in the Slide Editor. To change the default view to the Outliner or Slide Sorter, click the **Display** tab.
- ◆ Change the default style Harvard Graphics uses to create presentations on the **Defaults** tab. You can also turn on and off default Harvard Graphics actions, such as displaying prompts, using this tab.
- ◆ You can set how often Harvard Graphics saves your presentation on the **Autosave** tab.
- ◆ Use the **Ruler/Grid** tab to display rulers or a grid in the Slide Editor.

Harvard Graphics Learning Tools

This Chapter Shows You How To:

- ◆ Run the 5-Minute Coach tutorial (page 3-2)
- ◆ Get online Help (page 3-2)
- ◆ Use the Harvard Graphics Advisor to get tips and to check your presentation design (page 3-4)
- ◆ Use a professionally designed Quick Presentation as the basis for your own presentation (page 3-7)
- ◆ Get Technical Support (page 3-9)

5-Minute Coach Tutorial

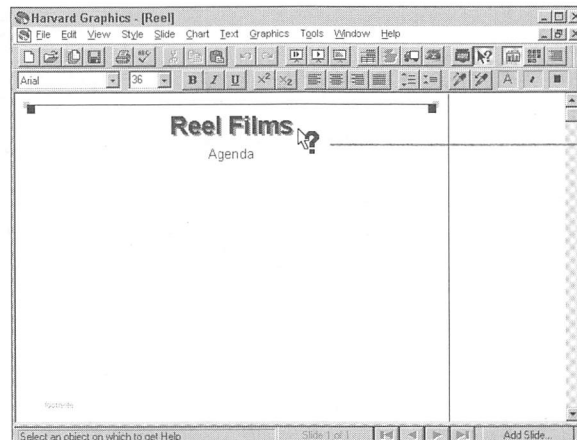
The 5-Minute Coach is an interactive tutorial that teaches you how to use Harvard Graphics in several easy lessons. Each lesson takes approximately five minutes to complete.

To start the 5-Minute Coach: Start Harvard Graphics, then click **Tutorial** in the opening dialog box or **Tutorial** on the Help menu. If you don't see the **Tutorial** button or menu item, you need to install the 5-Minute Coach. See page 1-3 "Installing Additional Files after a Compact Install."

Online Help



You can use the Help button on the toolbar to get help on any feature of the Harvard Graphics screen, including menu items, other buttons, and options in a dialog box. When you click the Help button on the toolbar, the mouse pointer changes to the help cursor. Pressing the Shift key and the F1 key at the same time also displays the cursor.



Move the help cursor where you want help, then click

To get help in a dialog box, click the ? icon in the upper-right corner of the box, move it over any option in the dialog box, then click. You can also right-click on any option, then click **What's This?** for a description of the option.



For more information about:

Click the **Help** menu, **Harvard Graphics Help**, and this **Help** tab:

How to use Help

Contents, then click **Reference**, then **Getting Help**

A particular topic

Index

Common Harvard Graphics tasks

Contents

Terminology

Contents, then click **Reference**, then **Glossary**

Using the keyboard

Contents, then click **Reference**, then **Using the Keyboard**

Technical Support

Contents, then click **Reference**, then **Contacting Technical Support**

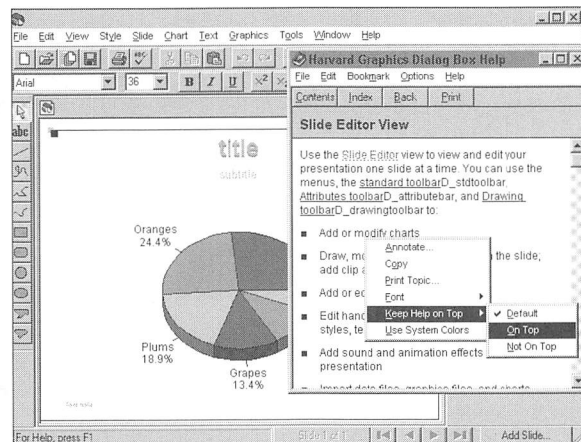


Notes

- ◆ If you've used previous versions of Harvard Graphics, double-click the What's New icon (WHATSNEW.HLP) or the Upgrade Information icon (UPGRADE.HLP) in the Harvard Graphics program folder for information on what's new or upgrading.
- ◆ See the Preface of this manual for information about using the online Help system.

Displaying Help Every Step of the Way

You can display the Help window all the time. This allows you to consult Help and perform a task at the same time.



To display Help all the time:

- 1 Display the Help topic you want.
- 2 Click the right mouse button in the Help window.
- 3 Point to **Keep Help on Top**, and click **On Top**.

Printing Help

Display the Help window you want to print, then click **Print** at the top of the window.

Advisor

The Advisor window shows editing or design tips that help you create a presentation. In the Slide Editor, you can also check your presentation design and see the results in the Advisor window.

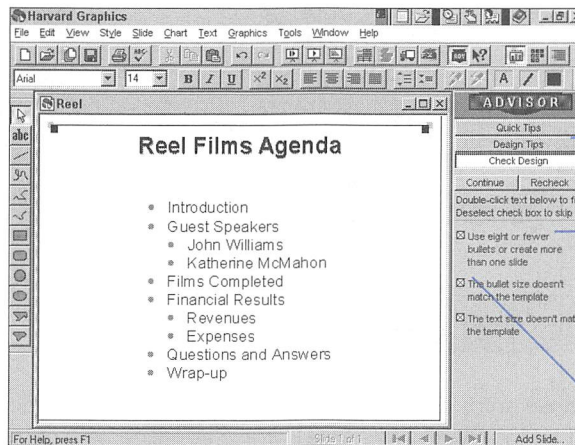


To show or hide the Advisor window: click **Advisor** on the View menu, or click the button on the standard toolbar.

Checking Your Presentation Design

Use the Design Checker to see suggestions about the design of individual slides or an entire presentation you've created. In the Slide Editor, click **Check Design** on the Tools menu; or, if the Advisor is displayed, click the **Check Design** button. The Design Checker looks at each slide in the presentation. The design check stops when a slide doesn't conform to any of several predefined Harvard Graphics design suggestions. The Advisor displays a message with suggestions for improvement.

Double-click a suggestion to open an appropriate Harvard Graphics view or dialog box where you can make changes. Harvard Graphics also displays Advisor Quick Tips with information about how to change the design.



Click a button to change what the Advisor displays

Double-click to open the Data Form and delete extra bullets in the chart

Deselect if you want to stop checking for this characteristic



For online Help about:

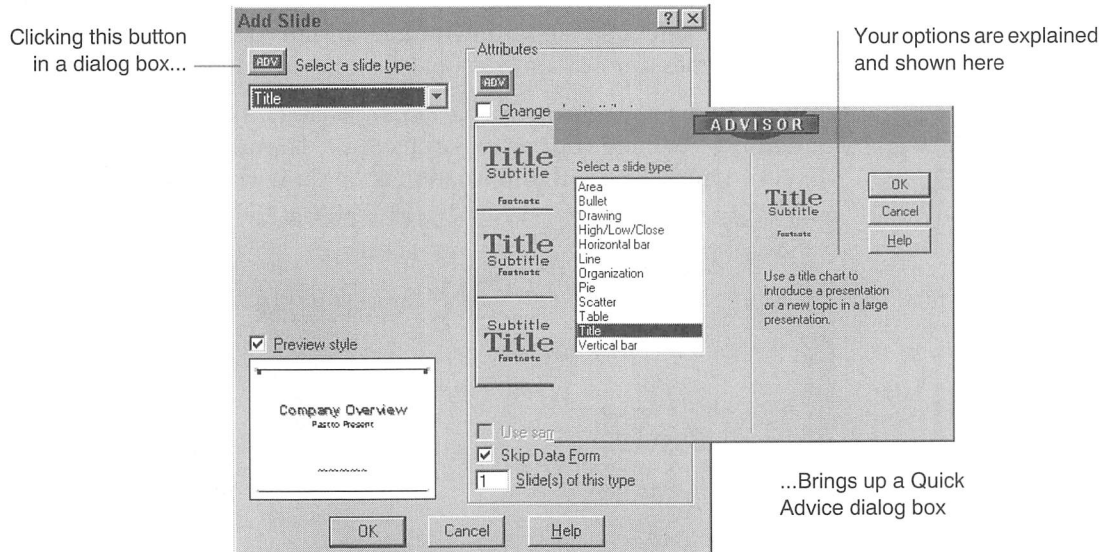
Checking the design of a presentation

Click this index entry on the Help Index tab:

design check

Quick Advice Dialog Boxes

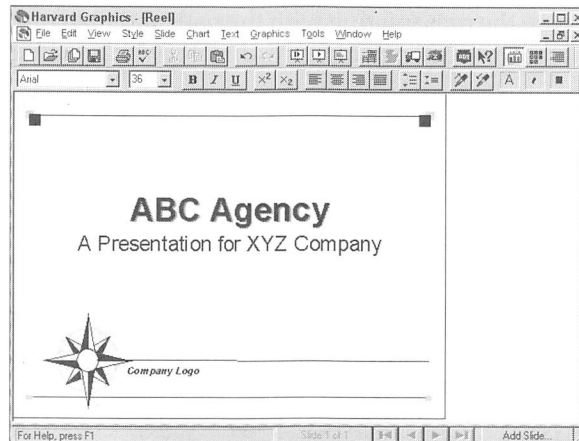
When you need to make decisions about the basic tasks in designing a presentation, click a button that opens a Quick Advice dialog box. (For example, the Add Slide and New Presentation dialog boxes have Quick Advice buttons.)



Choose an option in a Quick Advice dialog box, then click **OK**. The option will be in effect.

Quick Presentations

Professionally designed *Quick Presentations* are installed with Harvard Graphics. Each focuses on a common business need, such as a brainstorming session or a company profile.

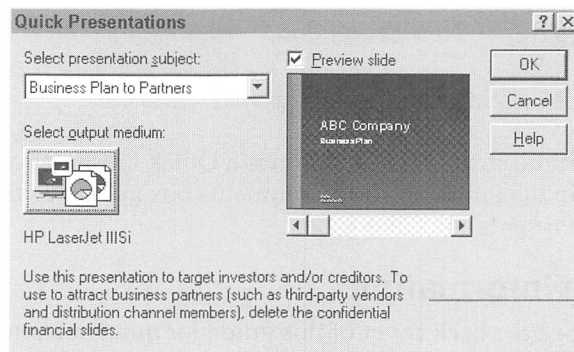


Start with an attractive presentation and add your own data to make it suit your needs

To use a Quick Presentation:



- 1 Click **Quick Presentations** on the opening dialog box or on the File menu, or click the button on the toolbar.



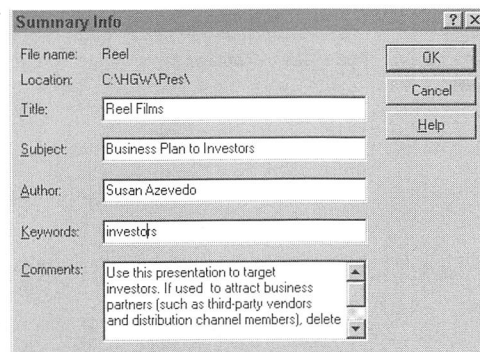
View information about why to use a selected presentation

- 2 Select the subject you want and an output medium; then click **OK**.
Harvard Graphics opens a copy of the Quick Presentation for your selected subject.
- 3 Make your changes to the presentation.
- 4 Save the presentation with the path and filename that you want (use .PR4 as the file extension) in the directory HGW\PRES\QUICKPRS.

To add your own presentation to the library of Quick Presentations: create the presentation and save it in the directory HGW\PRES\QUICKPRS with the extension .PR4. Type a file description (up to 120 characters) in the Save As dialog box. The first 25 characters that you type appear in the Quick Presentations dialog box alphabetical list. You can add other tips for using it in the Summary Information dialog box.

Viewing Presentation Summary Information

Click **Summary Info** on the File menu to view information about the current presentation.



If the current presentation is a Quick Presentation, comments that you type in the Summary Info Comments box appear as tips on the Quick Presentations dialog box.

Quick Reference Information

See the back cover of this guide for quick reference information on toolbar buttons.

Technical and Customer Support

You can get HotLine assistance in the U.S. and Canada from 9:00 a.m. to 9:00 p.m. (EST), Monday through Friday (excluding holidays).

**In U.S. and Canada,
call:**

Technical Support
(970) 522-9064
Fax: (970) 522-9074

With questions on:

Technical problems. Note the sequence of events that led to the problem and any program messages you see, and have this user guide available and Harvard Graphics running on your computer

Customer Service
(800) 234-2500
Fax: (408) 980-1518

Product upgrades, faulty disk replacement

To receive support Outside of U.S. and Canada:

Europe

First register your copy of Harvard Graphics. Once you register, you will receive an information pack with details about your regional support center.

Australia & New Zealand

Call + 61 2 561 5999

All other countries

Contact your local distributor

1. The first of these is the fact that the
theoretical model of the system is not
completely correct.

2. The second is the fact that the
theoretical model of the system is not
completely correct.

3. The third is the fact that the
theoretical model of the system is not
completely correct.



4

Working with Title, Bullet, Table, and Organization Charts

This Chapter Describes:

- ◆ Types of text charts (page 4-2)
- ◆ Changing the appearance of text charts (page 4-8)
- ◆ Adding a chart to an existing slide (page 4-15)

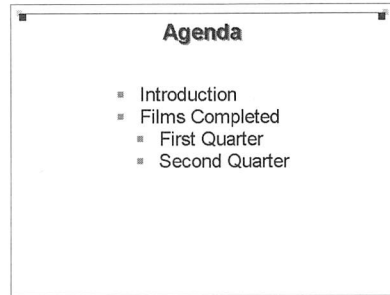
About Text Charts

Text charts are title, bullet, table, and organization charts. They are used primarily to display words, but can also display numbers and other characters.

You can create the following types of text charts:



Title

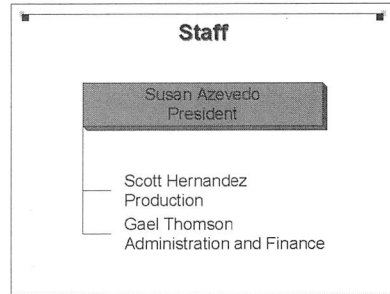


Bullet

A table chart with a white background and a thin black border. It features the title "Sales" in a bold, black font, with "(in millions)" in a smaller, regular black font below it. The table has three columns: "Region", "March", and "June". The rows are "North America", "South America", "Europe", and "All other regions".

	March	June
North America	\$454	\$225
South America	\$100	\$70
Europe	\$200	\$180
All other regions	\$60	\$45

Table



Organization



Free-form

Title Charts

Use a title chart to introduce your presentation. You can add text in the title, subtitle, and footnote areas of a title chart.

Create a title chart in the Slide Editor (directly on a slide), the Data Form, or the Outliner.



For online Help about:

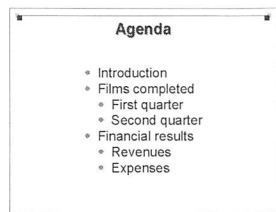
Click this index entry on the Help Index tab:

Creating title charts

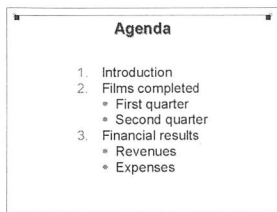
title charts

Bullet Charts

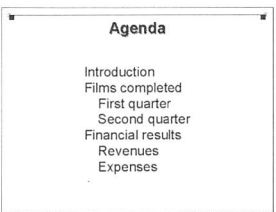
Use a bullet chart to introduce or summarize important points. A bullet chart can be a bullet list, numbered or alphabetic list, or simple list. A bullet chart can have a total of nine levels of bullets.



Bullet list



Numbered list



Simple list

Create a bullet chart in the Slide Editor (directly on a slide), the Data Form, or the Outliner.



For online Help about:

Click this index entry on the Help Index tab:

Creating bullet charts

bullet charts

Changing a bullet chart to an organization chart

changing chart types

Table Charts

Use a table chart to show relationships between categories of data. You can use words, numbers, or a combination of the two in tabular form.

The best way to create a table chart is using a Data Form.



For online Help about:

Click this index entry on the Help Index tab:

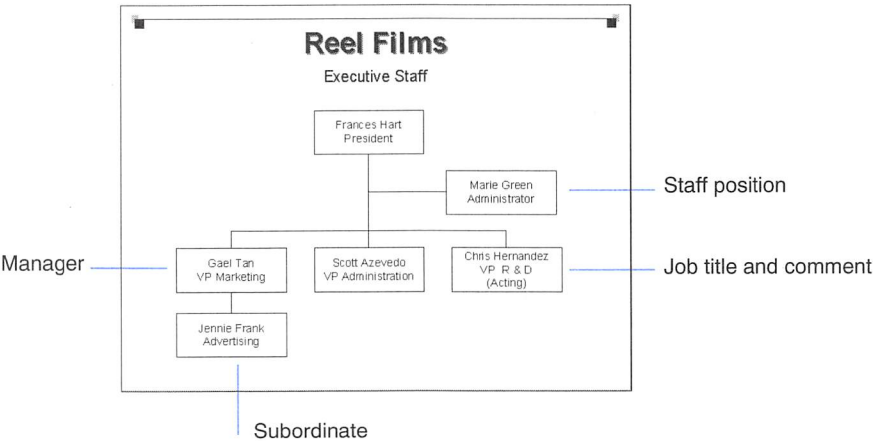
Creating table charts

table charts

Organization Charts

Use an organization chart to show the structure, parts, and relationships of an organization or company.

You can show up to 10 levels of positions in a chart and also add staff positions (for example, administrative assistants).



Create an organization chart in the Data Form, Outliner, or Slide Editor.

You can change a bullet chart to an organization chart in the Slide Editor or Outliner.

**For online Help about:****Click this index entry on the Help Index tab:**

Creating organization charts

organization charts

Changing a bullet chart to an organization chart

changing chart types

Free-form Charts

Use a free-form chart to present text or graphics in any style or placement.



Create a free-form chart using the Slide Editor.

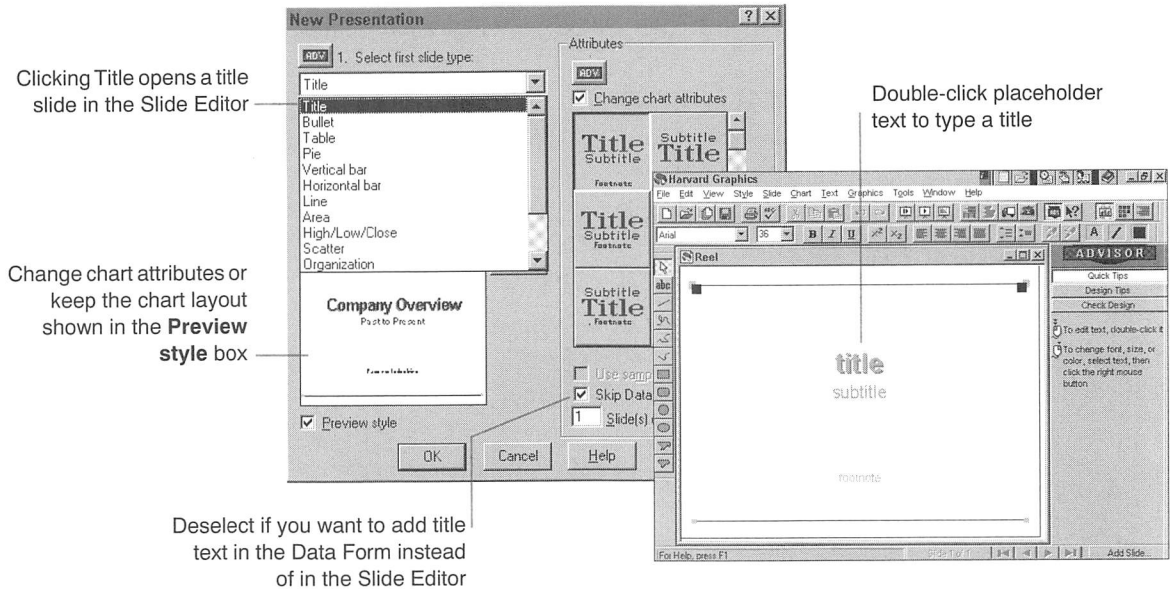
**For online Help about:****Click this index entry on the Help Index tab:**

Creating a free-form chart

free-form charts

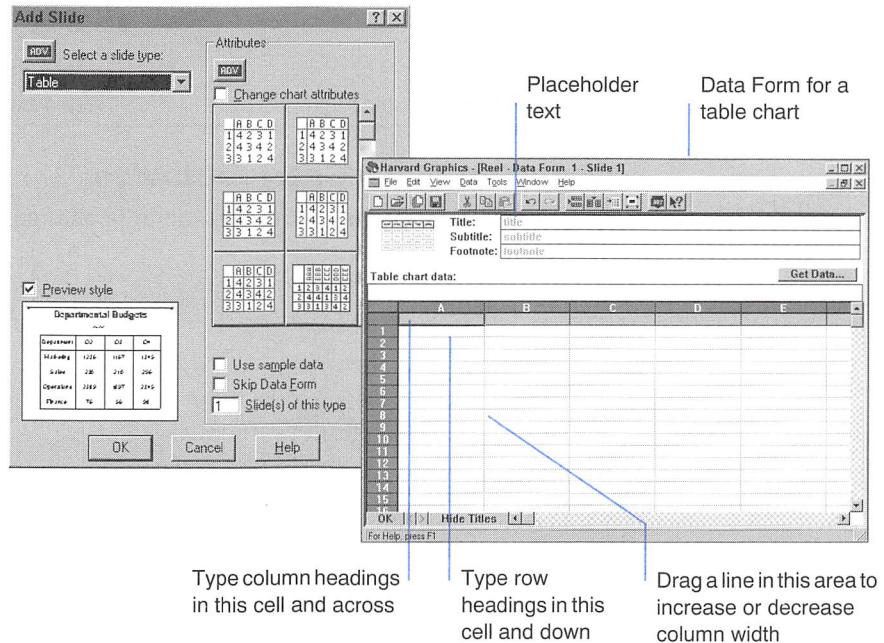
Creating a Text Chart in the Slide Editor

To create a title, bullet, or free-form text chart in the Slide Editor, click the **Add Slide** button at the bottom of the screen, then select the type of text chart you want from the **Slide Type** list. Make sure **Skip Data Form** is checked, then click **OK**.



Creating a Text Chart in the Data Form

To create a table or organization chart in the Data Form, click the **Add Slide** button at the bottom of the screen, then select the type of text chart you want from the **Slide Type** list. Make sure **Skip Data Form** is deselected, then click **OK**.



Type optional title, subtitle, footnote, column and row headings directly into the Data Form.

See page 5-9 "Creating Pie and XY Charts" for more information about entering data in the Data Form to create a table chart.



For online Help about:

Adding a slide to a presentation

Entering data in the Data Form


Click this index entry on the Help Index tab:

adding slides

charts, entering data for

Changing the Appearance of Text Charts

In the Slide Editor, you can change the appearance of an entire text chart, individual parts of the chart, and any text you have entered on the text chart.

 For online Help about:	Click this index entry on the Help Index tab:
Adding text to a slide	text annotations
Changing text attributes	text attributes


Changing Bullet Chart Attributes

Click **Bullet Attributes** on the Text menu to change:

- ◆ Bullet symbols
- ◆ Bullet symbol size
- ◆ Bullet fonts
- ◆ Bullet colors
- ◆ Distance between bullet symbol and text
- ◆ Format of numeric bullets (for example 1, 2, 3...; or I, II, III...)

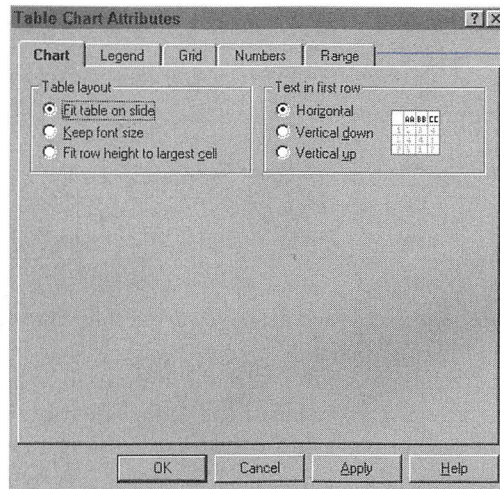
Changing the attributes of the bullet symbol allows you to specify the type of list (bullet, numbered, or simple) or to emphasize bullets at different levels.

All levels after the fourth bullet level use the attributes assigned to the fourth level.

 For online Help about:	Click this index entry on the Help Index tab:
Changing bullet symbol attributes	bullet symbols

Changing Table Chart Attributes

In the Slide Editor, right-click on the table chart you want to change, then click **Chart Attributes** on the pop-up menu to change the appearance of a table chart.



Click the **Chart**, **Legend**, **Grid**, **Numbers**, and **Range** tabs to see more options



For online Help about:

Resizing and moving a table chart

Selecting parts of a table chart

Inserting and deleting rows and columns

Changing column width and row height

Changing table layout

Formatting numeric data in table charts

Showing ranges for data

Adding grid lines

Showing a table chart legend

Click this index entry on the Help Index tab:

resizing charts

table charts, editing

formatting table charts

table charts, showing legend

Table Layout

- ◆ **Fit table on slide** sizes a chart to fit within the margins of a slide. The font size of data and size of all rows and columns change as necessary. Font size does not change for the title, subtitle, footnote, and legend.

Sales (in millions)		
	March	June
North America	\$454	\$225
South America	\$100	\$70
Europe	\$200	\$180
All other regions	\$60	\$45

Sales (in millions)		
	March	June
North America	\$454	\$225
South America	\$100	\$70

If you click **Fit table on slide** and **delete rows**, the chart changes like this

Keep font size shrinks rows and columns to fit a table chart on a slide, but does not change the font size of the data. The font size of data does not change. The size of rows and columns shrink to fit a table chart on a slide.

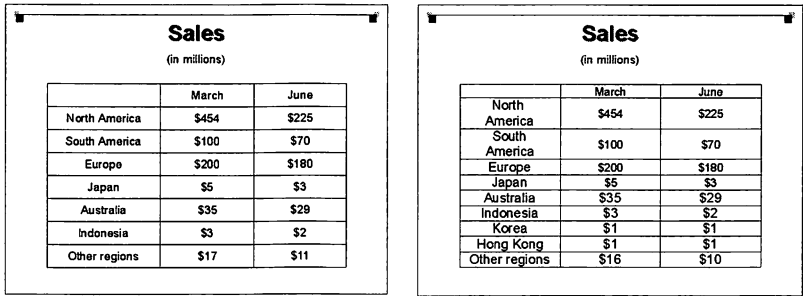
Sales (in millions)		
	March	June
North America	\$454	\$225
South America	\$100	\$70
Europe	\$200	\$180
All other regions	\$60	\$45

Sales (in millions)		
	March	June
North America	\$454	\$225
South America	\$100	\$70
Europe	\$200	\$180
Japan	\$5	\$3
Australia	\$35	\$29
New Zealand	\$3	\$2
Korea	\$1	\$1
Hong Kong	\$1	\$1
Israel	\$5	\$4
India	\$2	\$2
Morocco, Algeria	\$9	\$4

When there is no more room on the slide, part of the table chart is not displayed

If you click **Keep font size** and then **add rows**, the chart changes like this

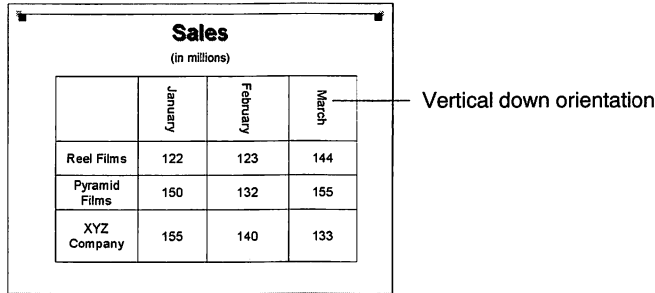
Fit row height to largest cell adjusts all cells in a row to the height of the largest cell. This is usually the most compact way of fitting a table chart onto a slide.



If you click **Fit row height to largest cell** and then add rows, the chart changes like this

Text in First Row

On the **Chart** tab of the Table Chart Attributes dialog box, click **Horizontal**, **Vertical down**, or **Vertical up** to set the orientation of text in the first row of a table.



Grid Lines

Use the **Grid** tab to select the number and placement of grid lines in a table chart.

The diagram shows a rectangular frame containing a title 'Expenses' at the top center. Inside the frame is a table with four columns: 'Division', 'Salaries', 'Facility Use', and 'Other'. The table has four rows: a header row and three data rows for 'Production', 'Quality', and 'Shipping'. A line points from the text 'Table chart frame' to the right side of the frame.

Division	Salaries	Facility Use	Other
Production	2000	345	57
Quality	1222	80	75
Shipping	1238	25	130

Grid lines displayed after the first column and row

Display Format for Numeric Data

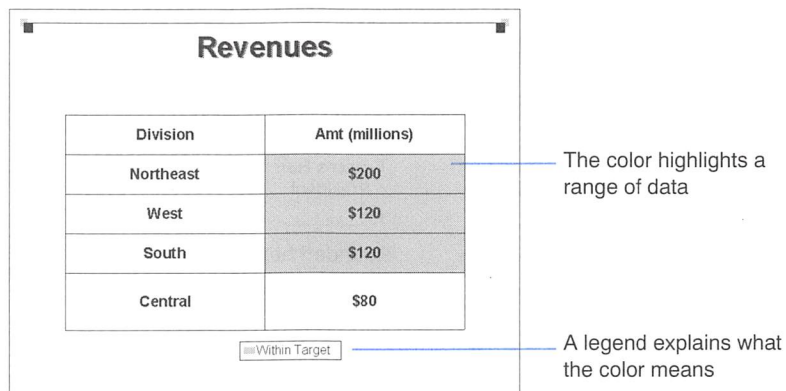
Use the **Numbers** tab to display numeric data in table charts in a format that makes your data easier to understand, for example, with a currency symbol. The format doesn't affect the value of the data and doesn't show in the Data Form.

Unless you select cells, rows, or columns that you want to format, your settings apply to all cells that contain numeric data.

If a cell has any character other than numbers, Harvard Graphics doesn't recognize that cell's data as numeric and you can't format the data using the table chart number format options.

Ranges and Legends

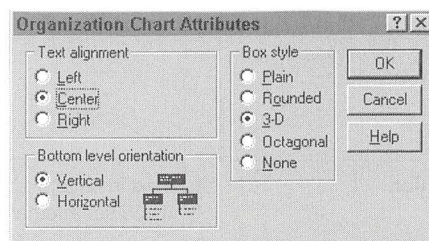
A range is a set of numbers defined by a minimum and maximum value. Use the **Range** tab to assign colors to highlight ranges of numbers in a table chart, for example, to emphasize differences in positive and negative values. You can show up to 10 ranges in a table chart and display a legend that explains the range colors.



Use the **Legend** tab to customize the appearance of a legend; for example, the legend frame and the position of the legend on the chart.

Changing Organization Chart Attributes

In the Slide Editor, right-click on the organization chart you want to change, then click **Chart Attributes** on the pop-up menu to change the appearance of an organization chart.



For online Help about:

Aligning text

Changing the box style

Changing the box fill and outline color

Moving a box in an organization chart

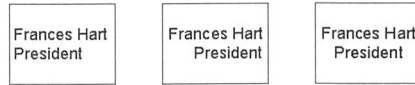
Click this index entry on the Help Index tab:

aligning text

organization chart boxes

Text Alignment

You can change how text aligns in boxes in the organization chart.



Left-aligned Right-aligned Centered

Box Styles

You can change the style of the boxes in the organization chart.



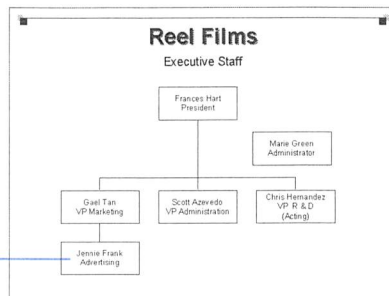
Plain box style Rounded box style



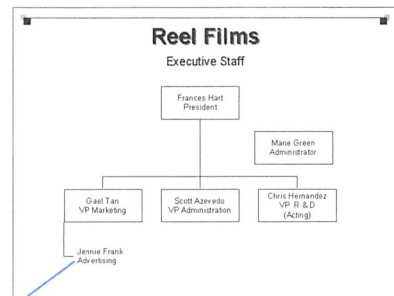
3-D box style Octagonal box style

Bottom-Level Orientation

The currently selected box style is used for the bottom-level boxes



Horizontal orientation



Text in bottom-level boxes is left-aligned even if you set another alignment as a chart option

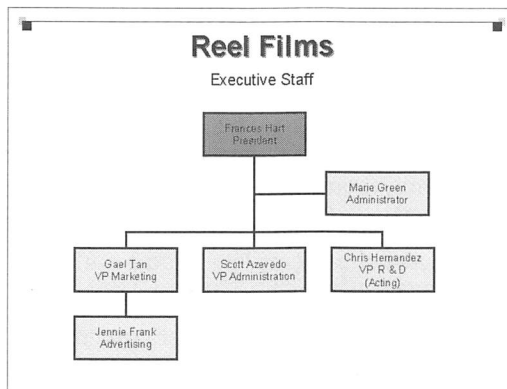
Vertical orientation

Changing the Box Fill and Outline Color

You can change the fill style of one or more boxes to a solid color, hatch or pattern, gradient, or bitmap. Select the box or boxes in the Slide Editor, click the Graphics Attributes button on the Attributes toolbar, then select options on the **Fill** tab. See page 8-13 “Fill Styles” for more information.

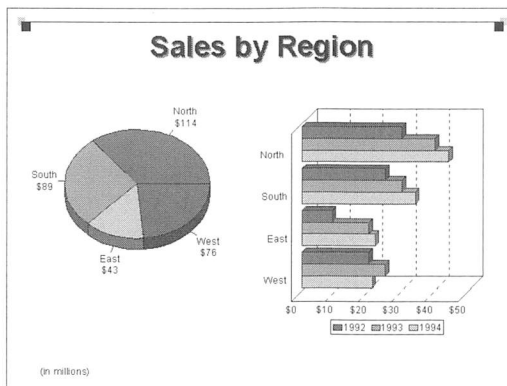


To change the thickness, style, and color of the box outlines and lines connecting boxes, select the outline or line boxes in the Slide Editor, click the Text Attributes button on the Attributes toolbar, then select options on the **Line** tab. See page 8-14 “Line Attributes.”



Adding a Chart to a Slide

A slide can have up to ten charts.



The following table summarizes how Harvard Graphics handles multiple charts on one slide.

If a slide has a chart of this type:	You can add a chart of this type:
Title	Data, table, bullet, organization
Bullet	Data, table
Table	Bullet, table, data, organization
Organization	Data, table
Data	Bullet, table, data, organization
Drawing	Title, bullet, table, data, organization



Notes

- ◆ To keep any links to chart data when you paste a chart, click **Options** on the Tools menu, then select **Keep data links when copying or moving charts** on the **Defaults** tab.
- ◆ You can use a custom template to add multiple charts to a slide. See page 9-7 "Multiple Chart Templates."
- ◆ An existing title or bullet chart that you cut or copy and paste is pasted as a text annotation. Table, organization, and data charts are pasted as charts. See page 8-4 "Working with Text" for information about text annotations.
- ◆ Although you can't have more than one title, bullet, or organization chart on a slide, you can add an additional chart of one of these types in the Slide Editor as a text annotation.
- ◆ When you add a chart to a slide that has a chart, the new chart appears on top of the existing chart. You can resize and move the charts until the slide looks the way you want.
- ◆ You can paste an entire copied or cut slide (not just the slide's chart). For example, you can paste a slide with multiple charts. See page 2-11 "Deleting, Copying, and Pasting Slides."



For online Help about:

Adding a chart to an existing slide

Click this index entry on the Help Index tab:

adding charts to slides

Working with Pie and XY Charts

This Chapter Describes:

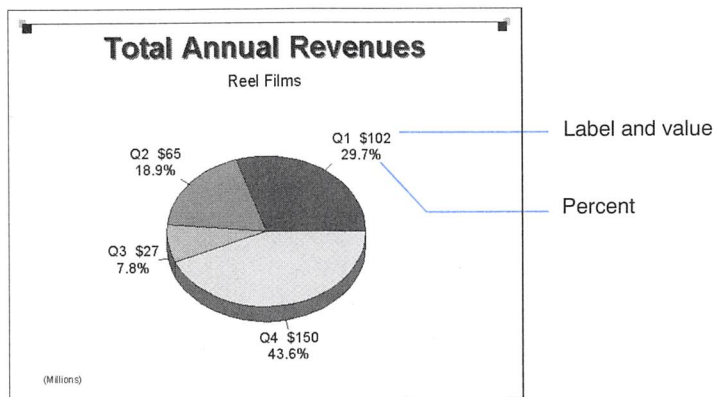
- ◆ How to choose an appropriate data chart for the information you want to convey (page 5-4)
- ◆ Creating pie and XY charts (page 5-9)
- ◆ Using formulas to calculate data (page 5-15)
- ◆ Changing the appearance of pie (page 5-17) and XY charts (page 5-22)

About Data Charts

Data charts are pie and XY charts. Use pie and XY charts when you have data you want to display graphically.

Pie Charts

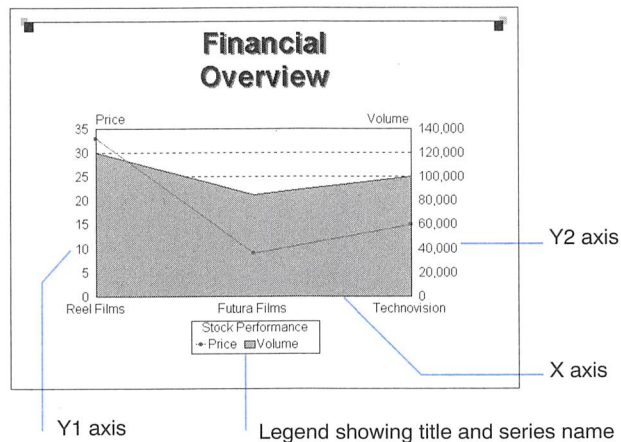
Use a pie chart to show how parts make up a whole. A single pie shows one series (set of related data). Each value in the series is displayed as a slice in the pie.



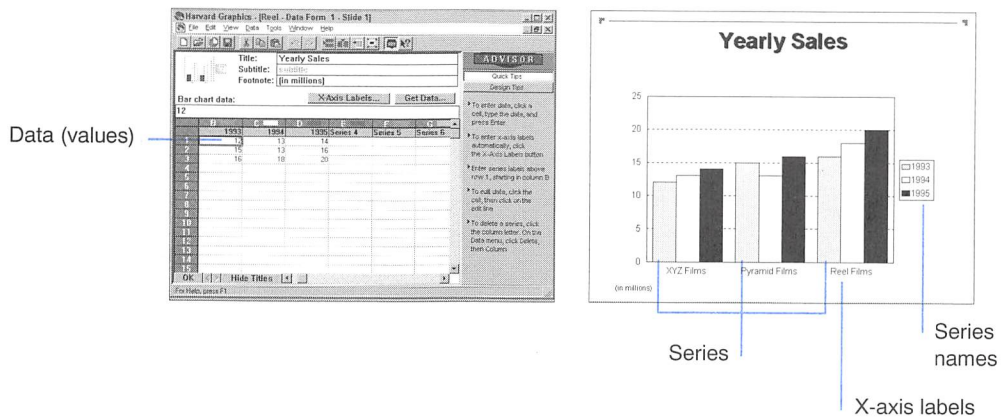
You can set options to display labels, percents, and values for a pie.

XY Charts

XY charts show data graphed along an X and a Y axis. Often the X axis is horizontal and the Y axis is vertical, but they can be reversed.



An XY chart shows one or more *series* of data (each series is a set of related data). Each series has one or more data points or values. Depending on the kind of chart, you can show a series as a set of horizontal or vertical bars, a line, an area, or a set of points.



The X axis shows the categories being measured, for example, time periods or products. The Y axis shows how much was measured, for example, dollar amounts or number of products sold. The Y axis can be on either the left (Y1) or right (Y2) of the chart, or a chart can have two Y axes.

Choosing the Right Chart

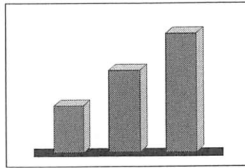
The first step in creating a data chart is choosing a chart that will convey effectively the information you're presenting. The table summarizes the information best conveyed by each kind of chart.

◆ Change over time

To show:

If your message includes: increase, decrease, rise, fall, highest, lowest, now, then, fluctuation

Use this chart type:



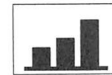
bar chart

To also show:

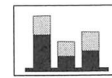
Change over a few time periods

Comparative totals for each set of data

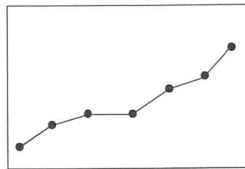
Use this chart style:



vertical bar



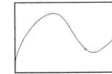
stacked bar



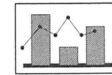
line chart

Change over time for many time periods

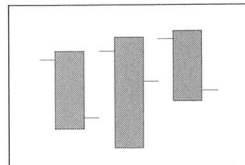
Emphasis on a particular factor



line or curve

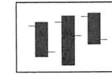


combined bar/line



high/low/close

Change for data (for example, stock prices) within a time period, such as a day or week



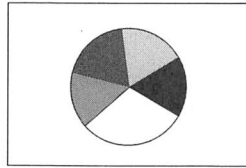
high/low/close

◆ Parts of a whole

To show:

If your message includes: percent, market share, total, sum, proportion, divide, piece

Use this chart type:



pie chart

To also show:

Parts of a whole (as values or percents)

Emphasis on a particular part

Breakdown of a part as another pie

Breakdown of a part as a column

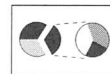
Use this chart style:



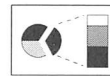
pie



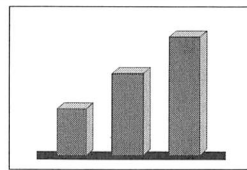
cut slice



linked slice and pie



linked slice and column



bar chart

Parts of several totals

Change in share of total



cumulative bar



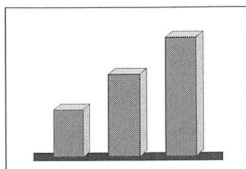
100% bar

◆ Relationships, comparisons, or correlations

To show:

If your message includes: how many, how often, smallest, segment, most, least, largest, comparison

Use this chart type:



bar chart

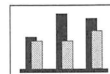
To also show:

Two closely related items

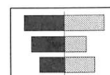
Two sets of data about the same item

Comparative totals for each set of data

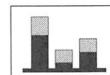
Use this chart style:



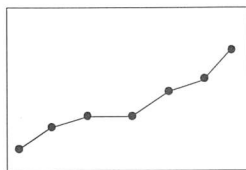
overlapping bar



paired bar



stacked bar



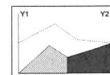
line chart

Emphasis on a particular factor

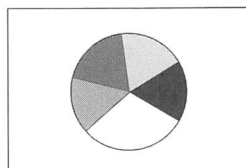
Relationship between two items using values scaled on both Y axes



multiple line



dual Y axes

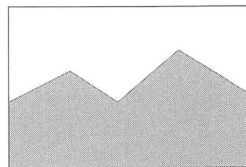


pie chart

Relationship between sets of items that differ only in size

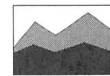


proportional pies



area chart

Emphasis on total quantities (volume) of several items



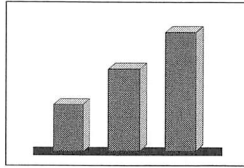
stacked area

◆ Order or rank of items

To show:

If your message includes: more than, less than, equals, ranks, higher, lower, bigger, smaller

Use this chart type:



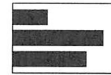
bar chart

To also show:

Rank of one item compared to others

Relative totals for several sets of items

Use this chart style:



horizontal bar



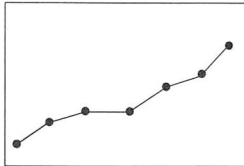
100% bar

◆ Trends or statistics

To show:

If your message includes: related to, increases/decreases with, relationship, changes/ varies with, linked to

Use this chart type:

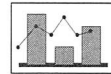


line chart

To also show:

Trend for a factor common to several items

Use this chart style:



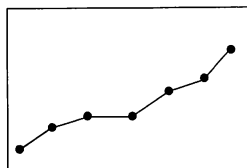
combined bar/line

◆ Scientific or technical data

To show:

If your message includes: trend, average, regression, frequency, distribution

Use this chart type:



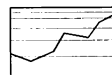
line chart

To also show:

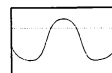
Large changes in values where increments aren't the same

Average for a set of data

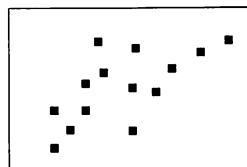
Use this chart style:



logarithmic



average



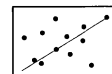
scatter chart

Relationship between independent variables, to identify a pattern

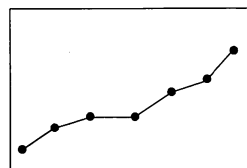


scatter points

Prediction pattern based on two sets of variables



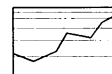
regression line



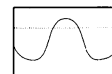
line chart

Large changes in values where increments aren't the same

Average for a set of data



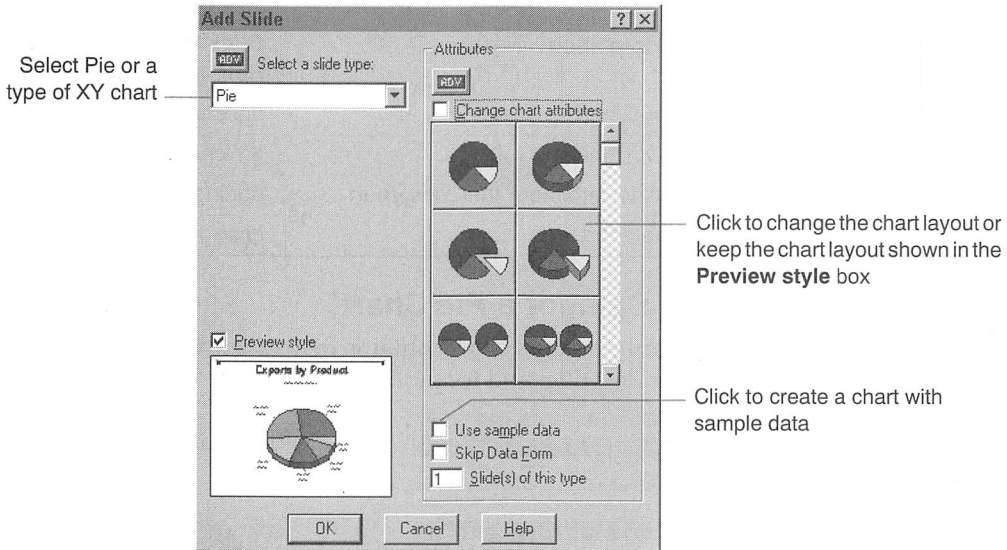
logarithmic



average

Creating Pie and XY Charts

In the Slide Editor, click the **Add Slide** button at the bottom of the screen, then select the slide type for the pie or XY chart you want to create.



You enter data for pie and XY charts in a *Data Form*. You can type your data directly into cells in the Data Form or enter it in other ways:

- ◆ Import labels and data from another file and keep a link to the data if you want. See page 6-2 "Importing Spreadsheet and Delimited ASCII Data."
- ◆ Use Dynamic Data Exchange (DDE) to link data from another file to a chart. See page 7-2 "Using Dynamic Data Exchange (DDE)."
- ◆ Paste data from cells in the same or another Data Form; paste or drag data from another application.
- ◆ Calculate a cell value in the Data Form using a formula. See page 5-15 "Using Formulas with Data Charts."

After you create a data chart, if you change your mind about the chart type you want to use, you can change it without having to retype your data. Click **Change Chart Type** on the Chart menu; then click **From Gallery** to see different kinds of charts and make another choice.



For online Help about:

Click this index entry on the Help Index tab:

Creating a pie chart

pie charts

Creating an XY chart

XY charts

Creating a slide with more than one chart

adding charts to slides

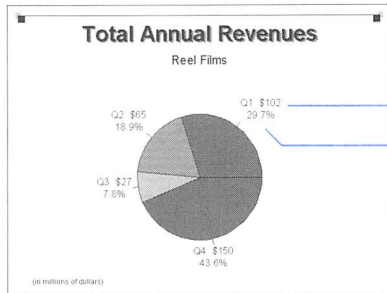
Changing the chart type

changing chart types

Entering Data for a Pie Chart

The Data Form for a pie chart contains fields for labels, values, and an optional title, subtitle, and footnote.

Characters that you enter appear here and in the selected cell



Labels
Values

The data in this Data Form...

...Creates this pie chart

You can edit labels and data in the Data Form unless the data is linked. If you have linked data using DDE or import, edit the data in the source file.

To type labels and data:

- 1 In the Data Form, make sure the first cell (cell A1) under **Pie1 Labels** is selected.
- 2 Type the first pie label and press Enter. Continue typing the rest of the labels.
- 3 Click cell B1 (under **Pie1 Values**), type the first value, and press Enter. Continue typing the rest of the pie values and click **OK** when you finish.

Make sure you enter only numeric characters for values.



For online Help about:

Entering labels and data for a pie chart

Click this index entry on the Help Index tab:

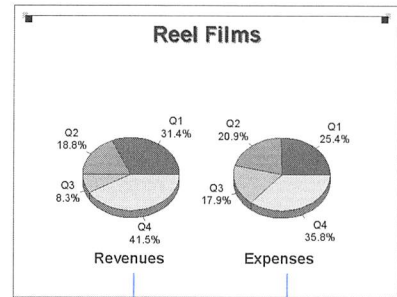
pie charts

Creating Multiple Pies

A single pie chart can have up to six pies.

	Q1	Q2	Q3	Q4
Revenues	18.01	31.4	20.9	41.5
Expenses	17	14	12	24

This Data Form has values for two pies...



Titles can be added as text annotations

...And creates this slide with two pies

If you size or move one pie, all pies in the chart act as a unit; options that you set for one pie apply to all. If you want pies that you can size and move independently, add each pie as a separate chart. See page 4-15 "Adding a Chart to a Slide."



For online Help about:

Creating multiple pies

Click this index entry on the Help Index tab:

multiple pies

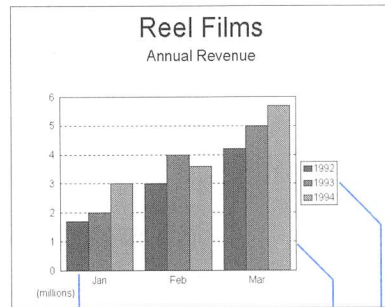
Entering Data for an XY Chart

The Data Form for an XY chart contains fields for X-axis labels, series names, data, and an optional title, subtitle, and footnote.

X-Axis Labels	1992	1993	1994
Jan	1.7	4	5.7
Feb	4.2	1.6	5.7
Mar	5.7	5.7	5.7

X-axis label

Values



X-Axis

Y-Axis

Legend

The data in this Data Form...

...Creates this vertical bar chart

To type labels, series names, and values:

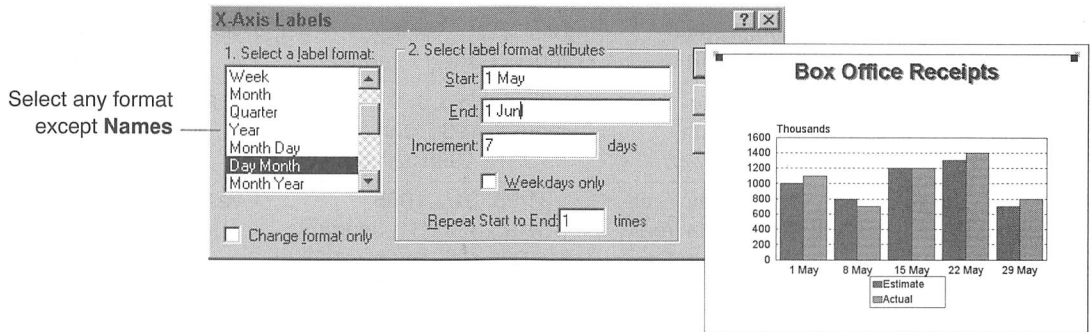
- 1 In the Data Form, make sure the first cell under **X-Axis Labels** (A1) is selected.
- 2 Type the first X-axis label and press Enter. Continue typing the rest of the X-axis labels.
- 3 Click the **Series 1** cell (in column B) and type a series name in it. Series names appear as labels in the chart legend.
- 4 Click cell B1, type the first value, and press Enter. Continue typing the rest of the values for the series.
- 5 Repeat steps 3 and 4 for each series in the chart.

Harvard Graphics displays the values you type as vertical bars, horizontal bars, or whatever slide type you specified in the Add Slide dialog box.

Working with X-Axis Labels

X-axis labels identify data categories. Labels can be names (for example, a list of products), numbers, dates, or times. If you type labels into the Data Form, Harvard Graphics interprets them as names.

For sequential numeric, date, or time labels, you can enter labels automatically by clicking the **X-Axis Labels** button in the Data Form and using the X-Axis Labels dialog box.



Harvard Graphics entered these X-axis labels automatically

The following table shows what to enter for X-axis labels of different types.

◆ X-axis labels

If your labels consist of:	You can type formats such as:	The default End value is:	The default Increment value is:
Names (for example, products, items, or other categories)	Any combination of characters in the order you want the labels to appear	None	None
Sequential numeric values	A starting whole number, decimal, or number expressed in scientific notation within the range of numbers that Harvard Graphics allows	Starting number plus 10	1
Day	1 to 7, or Sunday, Sun, S, SUNDAY, SUN	7 days or 5 weekdays	1 day
Week	Numbers 1 to 32,767	52 weeks	1 week
Month	1 to 12, January, Jan, JANUARY, JAN, J	12 months	1 month

◆ **X-axis labels** *(continued)*

If your labels consist of:	You can type formats such as:	The default End value is:	The default Increment value is:
Quarter	1 to 4, q1, 1q, Q1, 1Q, First, FIRST	4 quarters	1 quarter
Year	Numbers up to 32,767; '95, /95	5 years	1 year
Month Day or Day Month	12-1, 12/1, January 1, Jan 1, 1 JAN, 1 January	1 year	7 days or 5 weekdays
Month Year or Year Month	1/95, 1/1995, 1-'95, 95/1, January 1995, Jan 1995, '95 JAN, 1995 JANUARY	1 year	1 month
Month Day Year, Day Month Year, Year Month Day	1/31/95, 31/1/1995, 1-31-95, 95/1/31, January 31 1995, 31 January 1995, Jan 31 1995, 1995 JAN 31	1 year	7 days or 5 weekdays
Quarter Year Year Quarter	Q1 1995, q1/95, 95-Q1, 1995 Q1, First 1995, '95 FIRST	4 quarters	1 quarter
Time	1:00 pm, 1 PM, 13:00, 1300	24 hours	60 minutes
Time Day	1:00 pm Monday, 1PM Mon, 13:00 MON, 1300 M	24 hours	60 minutes

**Notes**

- ◆ To fill in X-axis labels for some cells, select the cells, then click the **X-Axis Labels** button.
- ◆ To enter labels automatically when a chart already has labels, click the cell where you want to start adding new labels. Adding new labels overwrites the existing labels.
- ◆ You can automatically change X-axis labels from one format to another if the formats are related. For example, you can change from Month Day to Month Day Year.

**For online Help about:**

Entering labels and data for an XY chart
 Editing labels and data for an XY chart
 Formatting axis labels for an XY chart

Click this index entry on the Help Index tab:

labels in XY charts

Dragging and Dropping Data

In addition to typing data directly into the Data Form, you can drag data from other programs that support dragging and dropping into the Data Forms for pie and XY charts. For example, you can drag data from your spreadsheet or database files.

You can also drag rows and columns of data to new locations within the Data Form. Click a row or column header to select the entire row or column. Moving the mouse pointer over an edge of the selected area changes it to a four-tipped arrow. Left-click on the selected row or column and drag it to its new location. If you press Ctrl while dragging, the selected row or column is copied instead of moved.



Notes

- ◆ Dragging and dropping data or objects from one Harvard Graphics view to another or from one program to another deletes the original data or object. To copy data or objects, press the Ctrl key as you drag.
- ◆ Click the right mouse button on any cell in the Data Form to display a pop-up menu containing items for cutting, copying, inserting, pasting, or deleting cell contents.

Using Formulas with Data Charts

You can calculate a cell value in the Data Form for a pie chart, XY chart, or table chart using a formula. If you change the values in any cells that are referenced in a formula, Harvard Graphics automatically recalculates the value in the cell associated with that formula.

The formula for a selected cell shows on the edit line

The intersection of a row and column is a cell

Harvard Graphics - [Reel - Data Form 1 - Slide 1]

Title: Reel Films Quarterly Meeting
 Subtitle: subtitle
 Footnote: footnote

Bar chart data: X-Axis Labels... Get Data...

	A	B	C	D	E
	X-Axis Labels	Current Year	Projected Year	Series 3	S
1	Jan	50000	55000		
2	Feb	70000	65000		
3	Mar	80000	75000		
4	Total Q1	200000	195000		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

OK <> Hide Titles

For Help, press F1

ADVISOR

Quick Tips
Design Tips

To enter data, click a cell, type the data, and press Enter

To enter x-axis labels automatically, click the X-Axis Labels button

Enter series labels above row 1, starting in column B

To edit data, click the cell, then click on the edit line

To delete a series, click the column letter. On the Data menu, click Delete, then Column

The value calculated by the formula shows in the cell

The totals in this Data Form are calculated using formulas

Entering a Formula

Click the cell where you want the formula, type the formula on the edit line, and press Enter.

If you copy a formula from one cell to the corresponding cell in the next column, Harvard Graphics changes the cell references in the formula to refer to the new column. For example, copying =SUM(B1:B3) from a cell in column B to a cell in column C changes the formula to =SUM(C1:C3). To keep cell references, use a dollar sign (\$) preceding each column and row in a cell reference. For example, to keep the same row and column references in the above example, type =SUM(\$B\$1:\$B\$3)

Using Functions

Using functions when you type a formula lets you perform frequently used calculations by typing a word or phrase. Functions are sometimes followed by *arguments*, which can be values, an expression, or cell references. For example, instead of typing this formula:

$$=(B1+B2+B3+B4+B5+B6+B7+B8)/12$$

you can use the function SUM and type it this way:

$$=SUM(B1:B8)/12$$

This formula adds the values in the range of cells from B1 to B8 and divides the result by 12.



For online Help about:

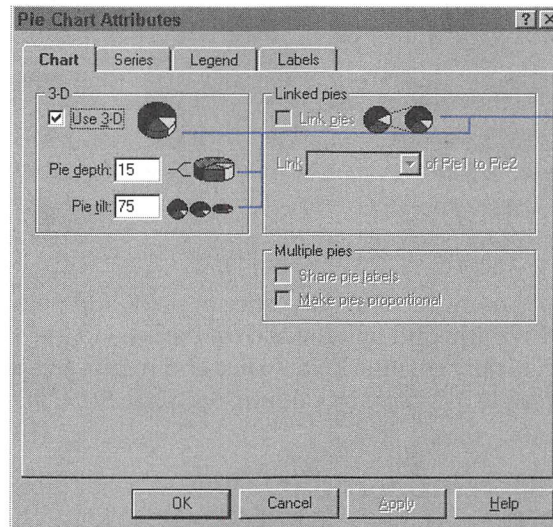
Using formulas

Click this index entry on the Help Index tab:

formulas

Changing the Appearance of Pie Charts

In the Slide Editor, right-click the pie you want to change and click **Chart Attributes** on the pop-up menu. Use the Pie Chart Attributes dialog box to change the appearance of a pie chart. To see more options, click the **Chart**, **Series**, **Legend**, and **Label** tabs.



Quick Looks illustrate the options you select

Pie Chart Attributes tabbed dialog box

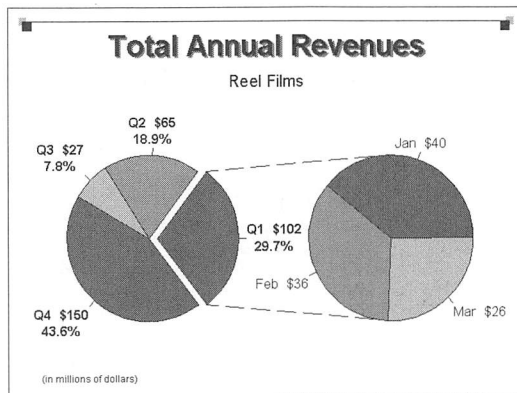


For online Help about:

Click this index entry on the Help Index tab:

Linking pies	linking pies
Making pies proportional	proportional pies
Displaying pie data as a column	pies, displaying as columns
Rotating pies	rotating a pie
Creating multiple pies	multiple pies
Sorting pie slices	sorting pie slices
Selecting and cutting a pie slice	cutting pie slices
Setting label options	labels in pie charts
Setting legend options for a pie chart	legends
Resizing pie and XY charts	resizing charts
Moving pie and XY charts	moving charts

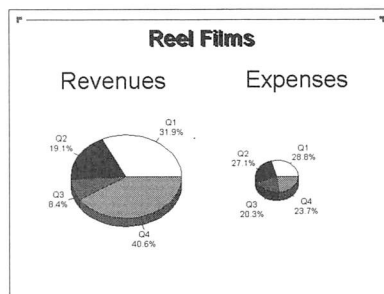
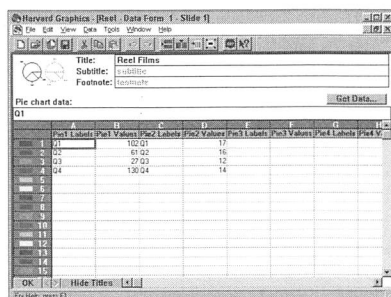
Linking Pies



To show more detail about a slice of pie 1, add data for a second pie in the Data Form and link the slice to the second pie. Harvard Graphics automatically cuts the linked slice and rotates the pie. You can display the data for pie 2 as a pie or column. See page 5-19 "Displaying Pie Data as a Column."

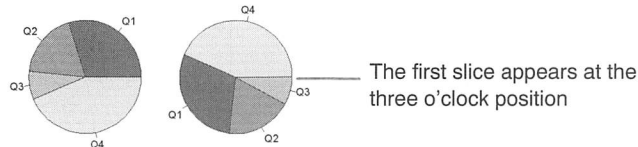
Showing Proportional Pies

To emphasize the differences in two or more pies, you can make the pies proportional. (Harvard Graphics makes the size of each pie proportional to the total data for all pies.)



Sorting Pie Slices

Normally, slices appear in the same order as values in the Data Form. Use the **Series** tab on the Pie Chart Attributes dialog box to sort pie slices. You can sort pie slices in a counterclockwise direction, from largest to smallest.

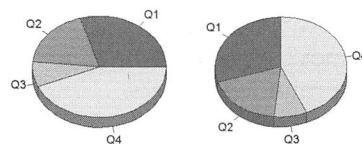


Before and after sorting slices

If you sort values in a column, Harvard Graphics displays the largest slice at the bottom of the column.

Rotating Pies

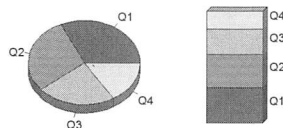
Use the **Series** tab on the Pie Chart Attributes dialog box to rotate a pie. You rotate the pie counterclockwise by changing the starting angle, which determines where the first slice is drawn. The default is the three o'clock position and a starting angle of 0.



A starting angle of 0 degrees compared to 90 degrees

Displaying Pie Data as a Column

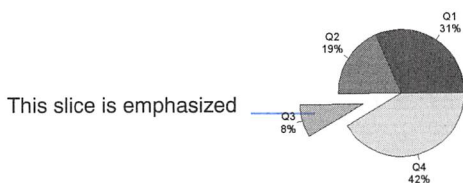
On the **Series** tab of the Pie Chart Attributes dialog box, select the pie you want to show as a column in the **Pie** list and click **Column**.



The same data displayed as a pie and as a column

Selecting and Cutting a Pie Slice

To select and cut a pie slice, click once on the chart, then click again on the slice you want to cut. Move the cursor to the selection handle in the middle of the slice, then drag it away from the pie.

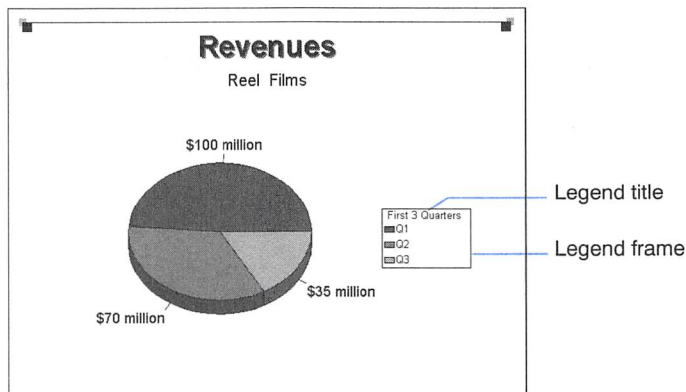


Changing the Size of Slice Pointers

Slice pointers are the lines that connect each label to its slice. If labels overlap, one way to adjust them is by changing the size of the slice pointers. To change them, click a slice pointer size on the **Series** tab of the Pie Chart Attributes dialog box.

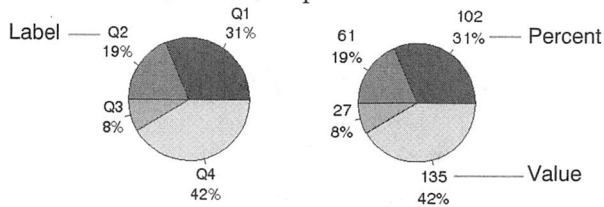
Showing a Pie Chart Legend

Use the **Legend** tab on the Pie Chart Attributes dialog box to show and position a legend on a pie chart. By default, Harvard Graphics doesn't display a legend on a pie chart, but it can be useful to show a legend instead of slice labels. You can move legends to different areas of the chart, and add frames with shadows or rounded corners.



Formatting Pie Labels

Use the **Labels** tab on the Pie Chart Attributes dialog box to show slice labels, values, or percents.



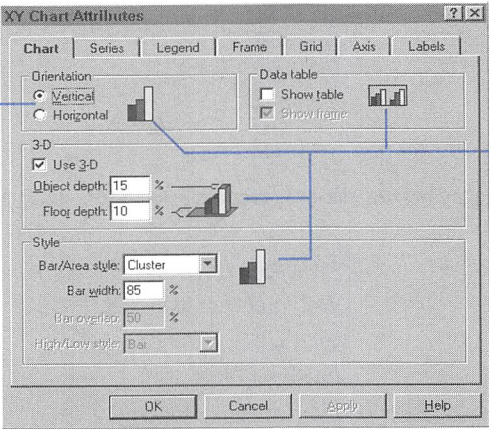
You can display labels, values, percents and choose their location on the slide

Click:	To display values:	Example:
Currency	With a currency symbol	\$200
Thousands separator	With a thousands separator (such as a comma)	20,000
Scientific notation	In scientific notation	2.000E+4
Decimal places	With the specified number of decimal places, adding zeroes or rounding to the nearest place, if necessary	If you type the number 1, the values 2, 2.33, and 2.5544 would be displayed as 2.0, 2.3, and 2.6
Leading text	With leading text	(Estimate) 25%
Trailing text	With trailing text	2 million

Changing the Appearance of XY Charts

In the Slide Editor, right-click on the XY chart you want to change, then click **Chart Attributes** on the pop-up menu. Click tabs on the XY Chart Attributes dialog box to change the appearance of an XY chart.

Select an orientation for the Y axis



Quick Looks preview the options you select



For online Help about:

Click this index entry on the Help Index tab:

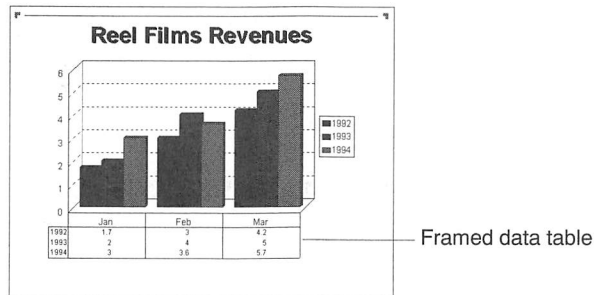
XY chart, editing

- Setting a goal range
- Setting series options
- Setting axis options
- Setting grid options

Setting label options	labels in XY charts
Setting legend options	legends
Setting chart frame options	framing charts

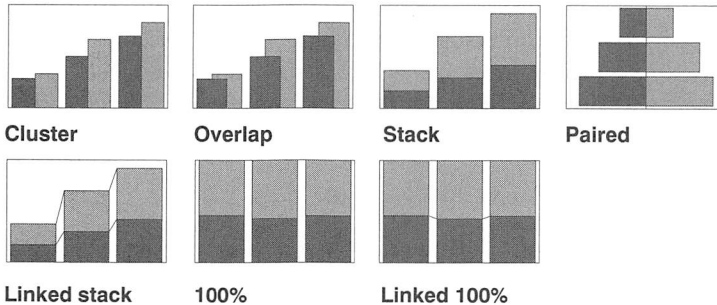
Displaying a Data Table

Select **Show table** to display an XY chart accompanied by a table containing the data used to create it. Be sure to select **Include series on a data table** on the Series tab for each series you want to select.



Changing Bar Chart Styles

The **Bar/Area** style list changes depending on whether you're working with bar, area, or high/low/close charts. Click one of these styles in the **Bar/Area** style list to change the style of bars in a bar chart. You can adjust the width of the bars and the amount that two-dimensional bars overlap.

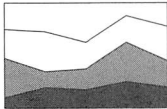


Note

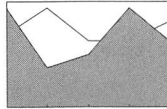
- ◆ To use the **Paired** bar chart style, create a horizontal bar chart and use two Y axes.

Changing Area Chart Styles

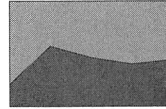
Click one of these styles in the **Bar/Area style** list to change the area style in an area chart.



Stack



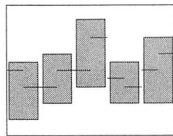
Overlap



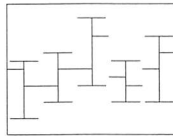
100%

Changing High/Low/Close Chart Styles

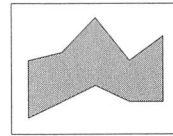
Click one of these styles in the **High/Low style** list to change the style for a high/low/close chart.



Bar



Error bar



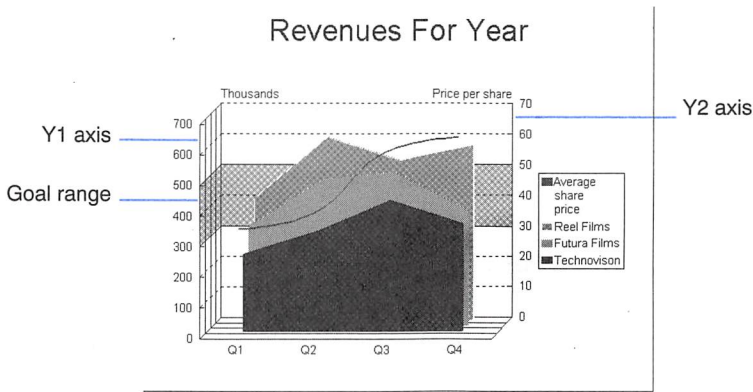
Area

Both **Bar** and **Error bar** style show open, close, high, and low values.

Bar emphasizes the change in each series, and is a good way to show stock prices. **Error bar** is best for showing intervals. Use the **Area** style to show how data fluctuates over time.

Displaying Two Y Axes

Use the **Series** tab on the XY Chart Attributes dialog box to display two Y axes. Use two Y axes to compare series that use different units of measure or that vary greatly in magnitude. For example, in the following chart, series data for revenue are shown as areas on the Y1 axis. Series data for stock price are shown as a line on the Y2 axis.



For online Help about:

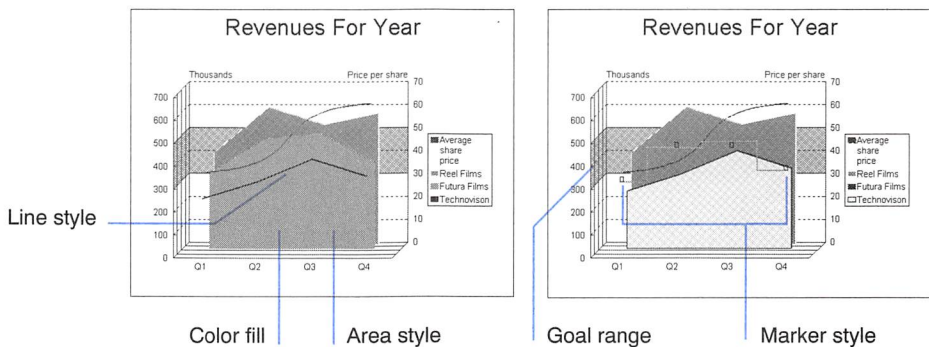
Displaying two Y axes for an XY chart

Click this index entry on the Help Index tab:

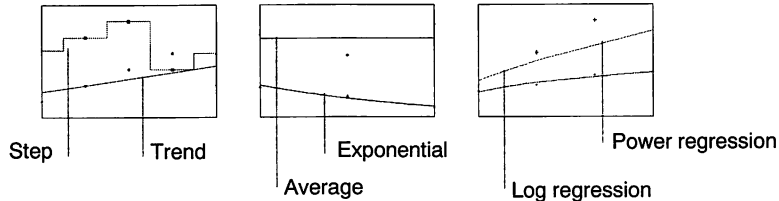
Y axes

Changing Series' Color and Style

Click options on the **Series** tab to change to a different style, line and fill color, and line and marker style. Series is how the data is displayed, for example as points or a line.



You can fit a line to data points if a series is shown as points or a line.



If you show a series as a line and click a line fit option (other than None), Harvard Graphics removes the existing line for the data, shows the data points, and adds a new line using the formula for the option that you've chosen. If you show a series as points and click a line fit option (other than None), Harvard Graphics shows both a line and the data points.

Setting Legend Attributes

A legend helps viewers distinguish among different series of data. Most XY charts show a legend by default. Use the **Legend** tab of the XY Chart Attributes dialog box to hide or change a legend for an XY chart.

Framing an XY Chart

Use the **Frame** tab of the XY Chart Attributes dialog box to hide or change the frame around your chart. A frame sets off the chart from the rest of the slide. By default, most XY charts appear with a frame.

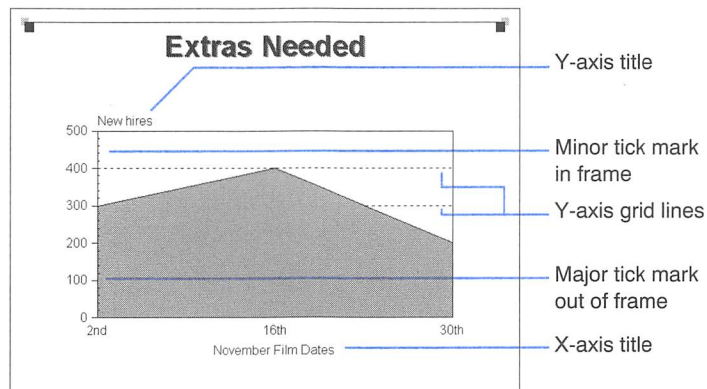
Setting a Goal Range

Use a goal range to highlight a range of values and compare your data with it. A goal range appears on a frame behind the data series in a chart.

You can select colors for the chart areas above and below the range. See page 9-12 "Chart Colors and Custom Colors."

Setting Axis Attributes

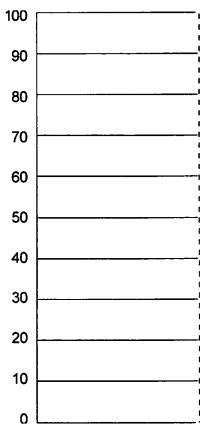
Use the **Axis** and **Grid** tabs of the XY Chart Attributes dialog box to show grid lines, tick marks, and axes titles, and to scale X and Y axes. By default, Harvard Graphics displays a Y-axis grid to make reading chart values easier. You can also show a grid for the X axis or for a second Y axis, or change the style of a grid.



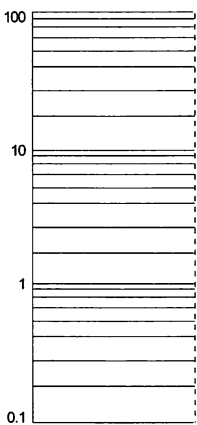
Scaling Y Axes and Numeric X Axes

Use scaling to make the axes on a chart easier to interpret. Harvard Graphics automatically scales axes, but you can override the automatic scaling.

Use linear scaling to create a chart with an equal distance between each unit or interval along the X and Y axes. Use log scaling to create a chart where the distance between each unit along the axis decreases as you go up the scale. This is useful to compare large and small quantities in the same chart, or to compress large variations within a series.



Linear scaling



Logarithmic scaling

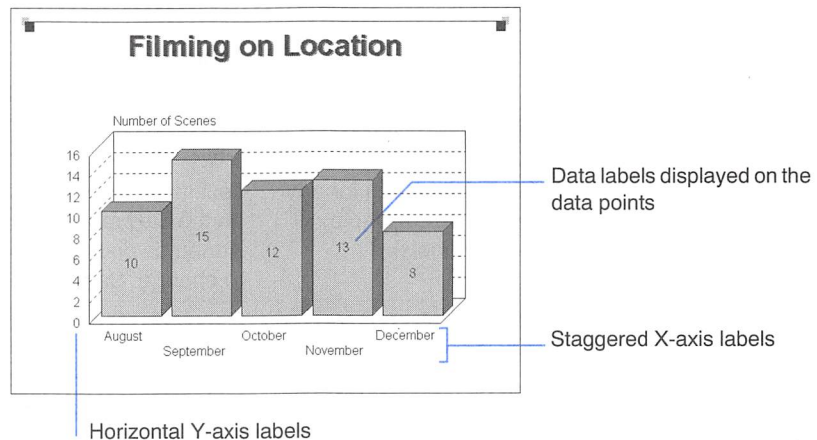
You can scale the X and Y axes independently and create either a *semi-log* graph, where only one axis is scaled logarithmically, or a *log-log* graph, where both X and Y axes are scaled logarithmically.

Scale Factor

If values in an XY chart are very large or small, you can scale the data to make the chart easier to read. Scaling divides all values by the same number or *factor*, and changes the range of values along the axis. For example, a value of 5,000 with a scale factor of 1,000 is shown as 5. Scaling doesn't change values in the Data Form, only the way values are displayed.

Formatting Axis Labels

Use the **Labels** tab on the XY Chart Attributes dialog box to control the appearance of labels for X and Y axes. You can also choose to display data labels (the values in the series of data) used in a chart.

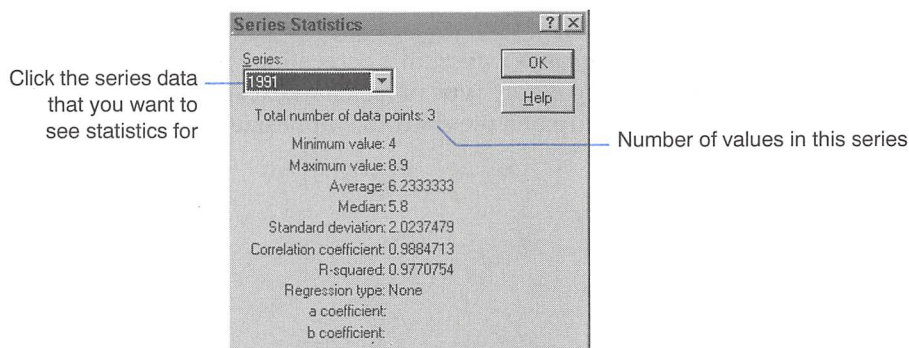


Note

To display a data label, make sure **Show data labels for series** is selected on the **Series** tab.

Displaying Series Statistics

Click **Series Statistics** on the Chart menu to display statistical information for any series in an XY chart.



**Note**

- ◆ Formulas for regression vary by type. The regression type appears on the dialog box only if the Line fit setting on the Series tab of the XY Chart Attributes dialog box is set to Trend, Exponential, Log regression, or Power regression and there are at least three values in the series.

Enhancing a Pie or XY Chart

You can enhance a pie or an XY chart in the following ways:

To:

Change text attributes for any text element (for example, legends and labels)

Click the:

Text in the Slide Editor. Click **Text Attributes** on the Text menu, then click options on the Text Attributes dialog box for the attributes you want to change. See page 8-3 “Adding Text”

Change the fill style of parts of a chart or pie slice

Chart and then the part you want to change. Click the right mouse button, then click **Graphics Attributes**. See page 8-13 “Fill Styles” and page 9-4 “About Templates”

Change the line attributes in a chart



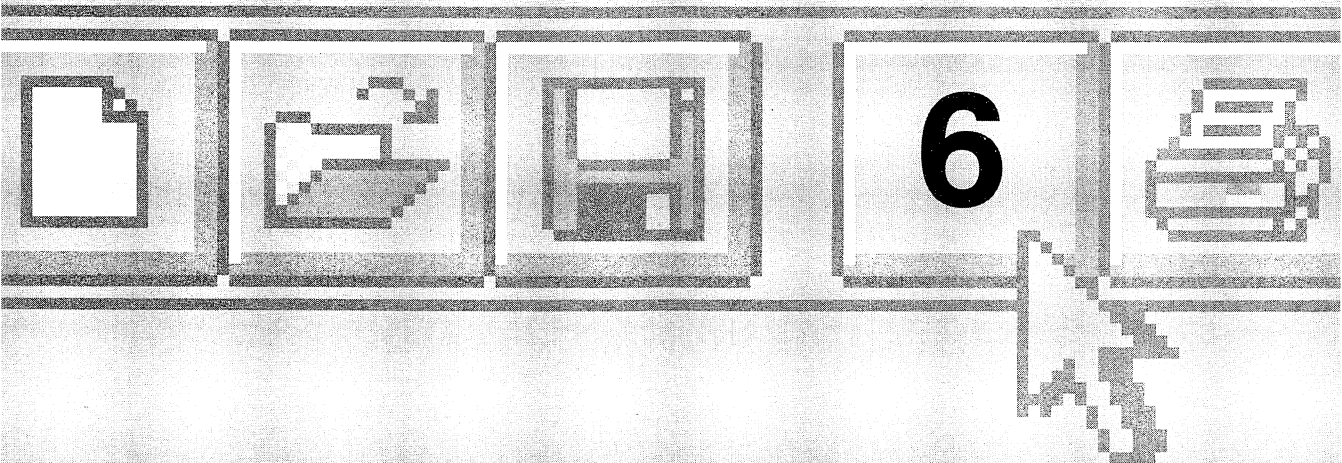
Chart and then the line you want to change. Click the Line Attributes button and then click the line attributes (style, color, thickness). See page 8-14 “Line Attributes”

Add special effects to a frame

Chart, then **Graphics Attributes** on the Graphics menu. Click the **Special Effects** tab on the Graphics Attributes dialog box and choose the effects you want. See page 8-15 “Special Effects”

**Note**

- ◆ When you display an XY chart in a ScreenShow, you can use Autobuild to create a buildup of any type of XY chart except high/low/close. You can create a buildup of a pie chart to emphasize one slice at a time.



Importing and Exporting

This Chapter Describes:

- ◆ Importing spreadsheet and delimited ASCII data (page 6-2)
- ◆ Importing ASCII text (page 6-6)
- ◆ Linking data that you import to the Data Form (page 6-5)
- ◆ Importing image files into Harvard Graphics (page 6-7)
- ◆ Exporting Harvard Graphics slides as image files (page 6-9)

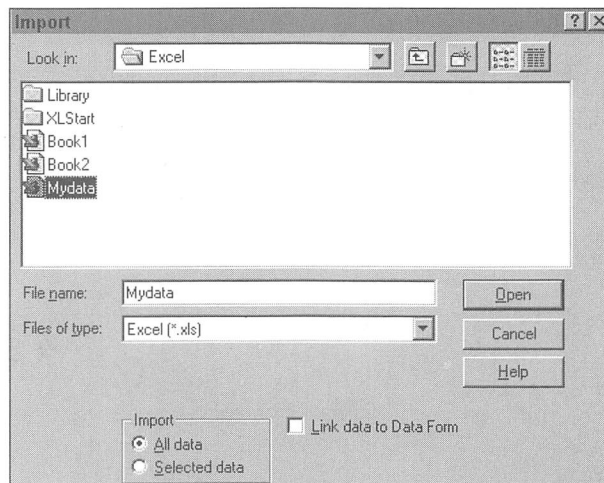
To:	Do this:
Import text into the Outliner	See page 6-5 "Linking the Data"
Import image files	See page 6-7 "Importing Image Files"
Import charts and shows from Harvard Graphics DOS 3.0	Double-click the "Upgrading Information" icon (UPGRADE.HLP in the Harvard Graphics program folder)
Print slides to disk in HPGL or EPS format	See page 11-6 "Printing to a File"

Importing Spreadsheet and Delimited ASCII Data

You can import data from the following sources into the Data Form of an XY, table, or pie chart:

Data source:	Filename extension:
Lotus 1-2-3	.WKS, .WK1, .WK3, .WK4
Microsoft Excel	.XLS worksheet format (version 5.0 or earlier, version 7.0)
Delimited ASCII	Any, other than those listed above

To import data, click **Import** from the File menu.



You can import all of the data in a file, up to 32 columns and 1024 rows, or you can import selected data.

You can import data from one or more sources into a Data Form. For example, import all of the data in an Excel file, then move the cursor to another location on the Data Form, and import selected data from a database file saved in delimited ASCII format. You can also import more than one set of data from a source. For example, import non-adjacent columns from a Lotus 1-2-3 spreadsheet, one column at a time.

Although you can import any type of data into the Data Form of an XY or pie chart, Harvard Graphics uses only integer and decimal values as chart series data. It handles character, date, and time data as text and can use such data for chart labels and series names. For table charts, Harvard Graphics uses integers and decimals as numeric data and character, date, and time data as text data.

Harvard Graphics imports:

- ◆ Up to 255 characters per cell
- ◆ Currency values (Harvard Graphics deletes currency symbols)
- ◆ Numbers expressed in scientific notation
- ◆ Fractions (Harvard Graphics imports their decimal equivalents)
- ◆ Formulas as values



Notes

- ◆ Before importing delimited ASCII data, check the delimiters used in the file. This will help you confirm or select the delimiters when you import the data.
- ◆ Before importing data from an international delimited ASCII file, check that the Regional Settings options in the Windows Control Panel match those used to create the file. Otherwise, currency and numeric data might be imported as text.
- ◆ Spreadsheet data that contains percent signs (%) is imported as its decimal equivalent.
- ◆ You can't import data from password-protected files.
- ◆ You can't import a spreadsheet that has a chart on it.

- ◆ When you work with Lotus .WK3 and .WK4 files, keep in mind that:
 - ◆ Only numbers and text, not charts, are imported
 - ◆ Some international characters might not appear
 - ◆ You are limited to importing data from sheet 1 of a multiple-sheet .WK3 or .WK4 file.



For online Help about:

Click this index entry on the Help Index tab:

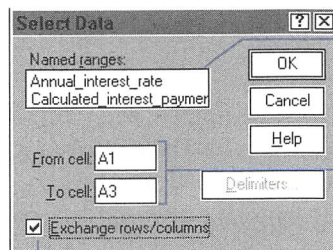
Importing delimited ASCII data
Importing Excel or Lotus 1-2-3 spreadsheet data

importing data

Selecting Data

You can choose to import all or selected data from a spreadsheet or delimited ASCII file. Select **Selected data** in the Import dialog box to specify a range of rows and fields you want to import from an ASCII file. For spreadsheet files, specify a range of cells or select a named range that was defined previously in the spreadsheet application.

You can also exchange, or switch, the rows and columns. This helps you control how imported data is used in the Data Form (as series names, X-axis labels, or chart data).



Click a name to import spreadsheet data from a named range

Type coordinates to import a block of spreadsheet or delimited ASCII data

Select to switch the rows and columns when you import



Notes

- ◆ If you select **Delimited ASCII** in the **File of type** list of the Import dialog box, the Delimiter dialog box appears, where you confirm or select the characters used to delimit strings and separate fields in the ASCII file.
- ◆ To import all data and switch the rows and columns, make sure the coordinates at **From cell** and **To cell** include all cells or fields in the file.
- ◆ By default, Harvard Graphics gives the coordinates for all cells or fields in the source file when it first displays the Select Data dialog box (the first and last cells with data in a spreadsheet, the first and last row and field for a delimited ASCII file).
- ◆ The coordinates of a named range that includes nonadjacent cells appear as a continuous range in the Select Data dialog box. For example, if a named range includes A1..A10 and F1..F10, the coordinates appear as **A1** and **F10**, and the data in that range of cells is imported.
- ◆ Harvard Graphics imports data only from named ranges on the first sheet of a multi-sheet spreadsheet. If a named range spans several sheets, only the area of the range on the first sheet is imported.

Linking the Data

Select **Link Data** in the Import dialog box to link the data you import to its source application. Linking data lets you update a presentation with the most recent source data each time you open the presentation. Linking is useful when you need to chart the same information on a regular basis, such as monthly sales forecasts. On a color monitor, linked data on the Data Form appears blue.

When you open a presentation that contains linked data, you can choose to update it with the most recent source data or to continue using the previous data.

To update a file with linked data automatically each time it's opened, deselect **Prompt to update links when opening a presentation** on the **Defaults** tab of the Options dialog box.

To keep data links when you paste slides from the Slide Sorter or charts from the Slide Editor into the same or another presentation, select **Keep data links when copying or moving charts** on the **Defaults** tab of the Options dialog box.

If you update the links and the source file has been renamed, moved, or deleted, Harvard Graphics tells you that the file can't be found. You can either keep the current data and continue, or click **Browse** to find the file. See page 7-12 "Fixing Broken (Unavailable) Links."

See page 7-2 "Using Dynamic Data Exchange (DDE)" for more information about linking data.



Notes

- ◆ You can't edit linked data or move it to another location on the Data Form.
- ◆ When you update a link to a named range that includes more cells than it did previously, the additional data can overwrite adjacent non-linked data.



For online Help about:

Using data from another program

Click this index entry on the
Help Index tab:

linking data

Importing ASCII Text

Before importing ASCII text into the Outliner, keep these points in mind:

- ◆ You can enter a maximum of 256 characters per line.
- ◆ Indented lines (with tabs) become subtopics of the line above, with up to ten levels per slide.
- ◆ Harvard Graphics treats each new text line with no tabs as a new slide. This includes text that wraps to the next line.
- ◆ A blank line becomes a blank slide.
- ◆ You can import only names into an organization chart (not job titles or comments).
- ◆ Text styles (such as italic or boldface) aren't saved in ASCII text files.

If you import an ASCII text file created in a DOS or OS/2 word processor or text editor, make sure the ASCII character set Harvard Graphics uses is the same one used in the other application. To create a presentation that's mostly text (bullet charts, title charts, and so on), you can type a presentation outline in a word processor and import it to the Harvard Graphics Outliner as ASCII text. Be sure the word processor you use can save data as an ASCII file.


```

Company Overview
Our Success Story
    Great strategic planning
    Wise investment in the future
        Short term
        Long term
Production Overview
Overseas Sales
FY 94 Forecast

```

This text...

```

1 ▸ title
2 ▸ Company Overview
3 ▸ Our Success Story
    ▸ Great strategic planning
    ▸ Wise investment in the future
        ▸ Short term
        ▸ Long term
4 ▸ Production Overview
5 ▸ Overseas Sales
6 ▸ FY 94 Forecast

```

...Produces this outline



For online Help about:

Click this index entry on the
Help Index tab:

Importing an ASCII text outline

ASCII text

Importing Image Files

You can enhance your presentation by importing graphic images, such as a company logo. When you import an image, it appears in the Slide Editor as a selected object in a slide.

You can import the following image file formats:

File type:	File extension:	Image type:
Windows Bitmap	.BMP	Bitmap
Corel Draw	.CDR	Vector
Computer Graphics Metafile	.CGM	Vector
Graphics Interchange Format	.GIF	Bitmap
Micrografx Drawing	.DRW	Vector
PC Paintbrush Bitmap	.PCC, .PCX	Bitmap
Kodak Photo CD	.PCD	Bitmap
Macintosh PICT	.PCT	Vector
TIFF Bitmap	.TIF	Bitmap
Windows Metafile	.WMF	Vector
WordPerfect Graphics	.WPG	Vector



Notes

- ◆ You can ungroup a *vector* image and manipulate each part separately. You manipulate a *bitmap* or *raster* image as one object in Harvard Graphics. See page 8-8 “Working with Objects.”
- ◆ If Harvard Graphics can’t find or duplicate a font in an imported image file, it replaces the font with the closest TrueType font.

Differences in Imported Images

When you import a graphic image, you might notice differences between the image in Harvard Graphics and in the original application. This can include differences in grouping, gradient fills, bitmap fills, or fonts. These differences don’t affect the image file on disk—only the imported image as it appears in Harvard Graphics.

For bitmap files (.BMP, .GIF, .PCC, .PCD, .PCX, or .TIF format), the image you import can vary in size depending on the device you selected in the Print Setup dialog box. The same bitmap image imports smaller if you selected a printer than if you selected **Display**. However, you can resize an imported image as you would resize any other object.

Some imported images might include objects that are the same color as the background fill of the master template or an individual slide in Harvard Graphics. If objects in an imported image seem to disappear, change the background fill of the master template or the slide to see the entire image.



For online Help about:	Click this index entry on the Help Index tab:
Importing image files	importing graphics
Setting up printing for the current presentation	printing presentations

Copying Charts from Other Products

You can copy objects and charts from other presentation graphics products such as PowerPoint and Freelance Graphics using cut, copy, and paste, or by dragging them into the Slide Editor.

If supported by the source program, you can drag a chart into the Slide Editor as an OLE object. To activate the OLE object in the Slide Editor, double-click it.

If the source program does not support OLE dragging and dropping, the chart is dropped into the Slide Editor as an image (picture format). You can also bring objects into the Slide Editor as images using the Paste Special command. Select **Paste Special** and click **Picture** in the Paste Special dialog box to paste the object in picture format.

To convert an image to a Harvard Graphics object, double-click it. You can then change the appearance of the object like any other Harvard Graphics graphic object. The original source data used to create the chart is no longer available to you.

Exporting Slides as Image Files

Harvard Graphics exports slides as images in the following file formats:

File type:	File extension:	Image type:
Windows Bitmap	.BMP	Bitmap
ANSI Computer Graphics Metafile (CGM)	.CGM	Vector
Graphics Interchange Format	.GIF	Bitmap
Harvard Graphics CGM	.CGM	Vector
Lotus Freelance Plus CGM	.CGM	Vector
Macintosh Graphics PICT	.PCT	Vector
PC Paintbrush Bitmap	.PCX	Bitmap
TIFF Bitmap (version 5.0)	.TIF	Bitmap
Windows Metafile	.WMF	Vector
WordPerfect Graphics	.WPG	Vector



Notes

- ◆ Harvard Graphics automatically adds the appropriate extension when you export the slide to an image file.
- ◆ When you export an entire presentation, Harvard Graphics creates an image file for each slide in the presentation. To create a filename for each image file, Harvard Graphics adds a three-digit sequential number to the presentation filename you type. If your presentation filename is longer than five characters, Harvard Graphics truncates it. For example, if you typed **HGPRES.CGM**, the image filenames would be **HGPRES001.CGM**, **HGPRES002.CGM**, and so on.
- ◆ If you want to use a chart as an image in Harvard Graphics (instead of exporting it), click **Chart to Image** on the Chart menu. See page 8-16 "Converting a Chart to an Image."



For online Help about:

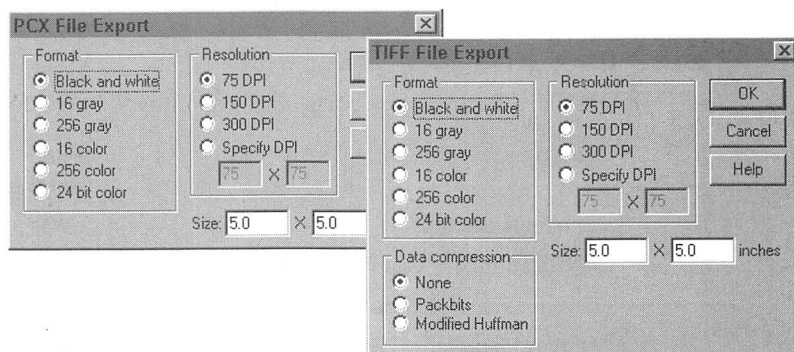
Exporting one or more slides as images

Click this index entry on the Help Index tab:

exporting

Exporting Bitmap Files

When you export a slide or presentation in a bitmap format (.BMP or .PCX), the PCX File Export dialog box appears. For slides or presentations in .TIF format, the TIF File Export dialog box appears.



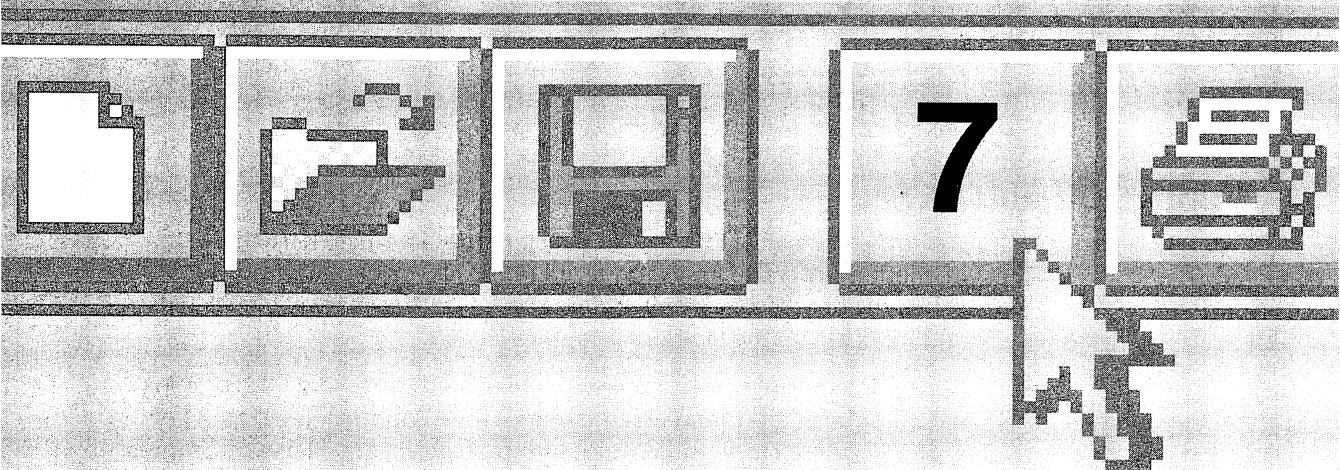
You can set options for color format, output resolution (dots per inch, or DPI), and size. For grayscale output on monochrome devices, click **16 gray** or **256 gray**.

Resolution and size settings work together to determine the appearance of the exported image. For the best appearance, select a resolution that matches the output device you'll use. With most file formats and many output programs, the exported image prints in the size that you specify.

To select a DPI setting, use these guidelines.

Select:	To:
75 DPI	Export for on-screen display
150 DPI	Output to a printer with a resolution of 150 DPI or less
300 DPI	Output to a printer with a resolution of 300 DPI
Specify DPI	Specify a printable resolution in pixels. (Type the values in the boxes.) Use this to output on a device that supports the specified DPI

Check your application documentation to find out which compression mode you should use to export files in .TIF format. (Packbits is the most common compression mode, but depending on your application, you might want to use Modified Huffman instead.)



Exchanging Information: DDE and OLE

This Chapter Describes:

- ◆ Using Dynamic Data Exchange (DDE) to link data to a Harvard Graphics chart (page 7-2)
- ◆ Whether to link or embed an object (page 7-4)
- ◆ Using Object Linking and Embedding (OLE) to insert an object in a Harvard Graphics slide (page 7-5)
- ◆ Using OLE to embed or link Harvard Graphics slides in another program (page 7-10)
- ◆ Modifying DDE and OLE links and fixing broken links (page 7-12)

About DDE and OLE

Use DDE to create a link between a Harvard Graphics chart and data in another program, for example, a Lotus 1-2-3 or Excel spreadsheet. When the data changes in its original location, the change is reflected automatically in the Harvard Graphics chart.

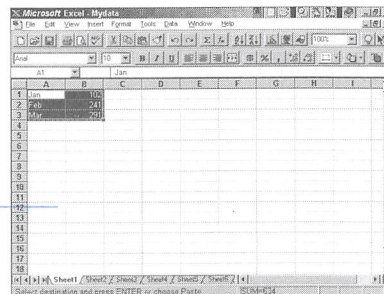
Use OLE to create a link to objects or to embed them. (An OLE *object* is data or information from an OLE-compatible Windows program.) For example, add a Harvard F/X or Paintbrush object to a Harvard Graphics slide, or insert a Harvard Graphics slide in a report. Once you link or embed an object, you can work with it in its original program without leaving the program where you inserted it.

You can work with OLE1- and OLE2-enabled programs in Harvard Graphics.

Using Dynamic Data Exchange (DDE)

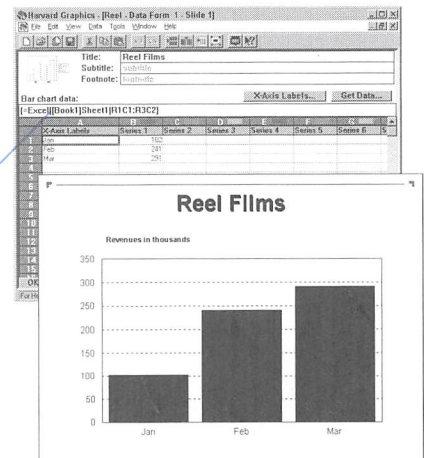
A data *link* is a reference from one file to the location of information in another file.

The spreadsheet program is the server (source) of the data



	Jan	Feb	Mar
1	100	250	250
2	100	250	250
3	100	250	250
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			

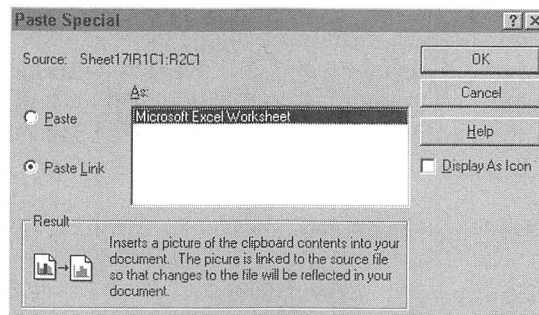
Information about the linked data is on the Data Form edit line



Harvard Graphics is the container (destination) for the data

To create a DDE link:

- 1 Open the server program and create and save the file you want to link to.
- 2 Select the data you want to link to, then choose the appropriate copy command on the server program's Edit menu. Don't close the file.
- 3 Open Harvard Graphics and the Data Form for the chart that will use the linked data. Click the first cell where you want linked data.
- 4 Click **Paste Special** on the Edit menu and select **Paste Link**.



Linked data is updated automatically in Harvard Graphics as soon as it changes in the server program, unless you specify a manual update in the Links dialog box and control the updates yourself. You can also modify link information and fix broken links using the Links dialog box. See page 7-12 "Fixing Broken (Unavailable) Links."



To remove data and cancel a DDE link: select the entire range of linked cells in the Data Form and click **Cut** or **Clear**.

To keep data but cancel a DDE link: click **Links** on the Edit menu and then click **Break Link** in the Links dialog box.

Keep the following in mind when you use DDE links:

- ◆ You can edit the data only in the server file.
- ◆ Start both Harvard Graphics and the server program using the same Regional settings in the Windows Control Panel. Otherwise, data might be formatted incorrectly or lost.
- ◆ You can copy part of a linked range of data, but you must cut, delete, or overwrite the entire linked range.
- ◆ To keep DDE links when you paste slides from the Slide Sorter or charts from the Slide Editor into the same or another presentation, click **Options** on the Tools menu and click **Keep data links when copying or moving charts** on the **Defaults** tab. The DDE links will be temporarily unavailable after you paste the slide or chart. See page 7-12 “Fixing Broken (Unavailable) Links.” for more information.



For online Help about:

Using data from another program

Click this index entry on the Help Index tab:

linking data

Understanding Object Linking and Embedding (OLE)

OLE is an effective way to combine information from several programs in one location (called a *compound document*). For example, use OLE to display an Excel spreadsheet on a Harvard Graphics slide. Or use OLE to include a Harvard Graphics slide in a report created in Microsoft Word. The program where you create an OLE object is the *server* program. The program where you insert the object is the *container* (destination) program. Harvard Graphics can be both a server and a container.

These are the major differences in linking and embedding:

- ◆ When you link an object, you create a reference from the container document to an external file containing the object. Any changes that you make to the object are actually made in the server program.
A linked object is updated automatically in Harvard Graphics as soon as it changes in the server program, unless you specify a Manual type of update and control the updates yourself. You can also modify link information and fix broken links.
- ◆ When you *embed* an object, you paste or drag and drop a copy of the object in the container document. The embedded object becomes part of the container file.

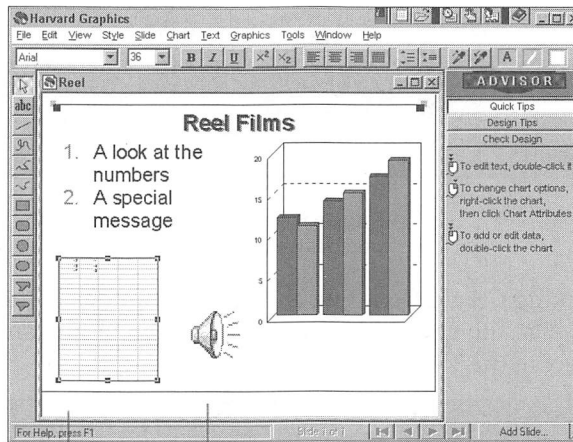


Note

- ◆ Throughout the rest of this chapter, information is applicable to both linked and embedded objects unless it's identified specifically as applicable to only one.

Linking and Embedding an Object in a Slide (OLE Container)

This section describes how to work with Harvard Graphics as a container (destination) for OLE objects. You can link or embed into Harvard Graphics an existing OLE object or one that you create yourself.



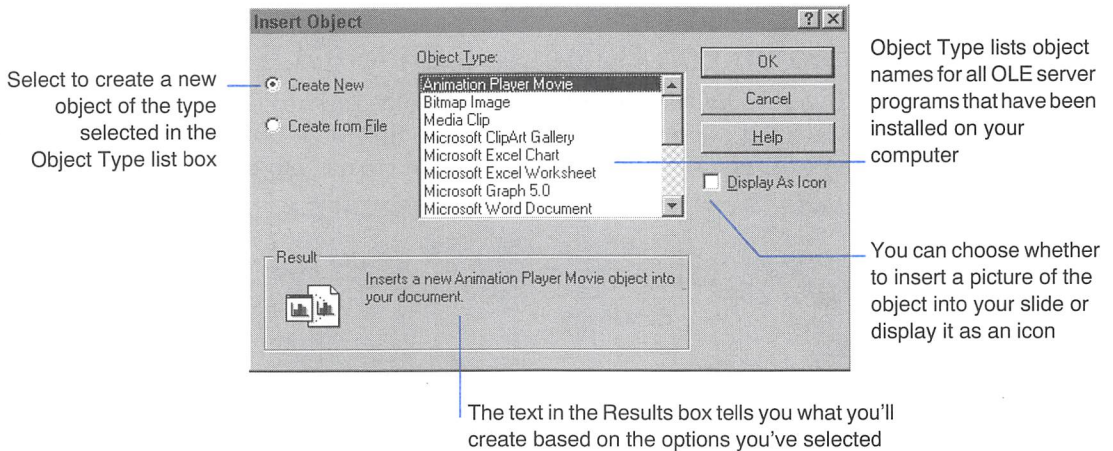
Shortcut icon indicates a linked OLE object

Solid border indicates a linked or embedded object when selected

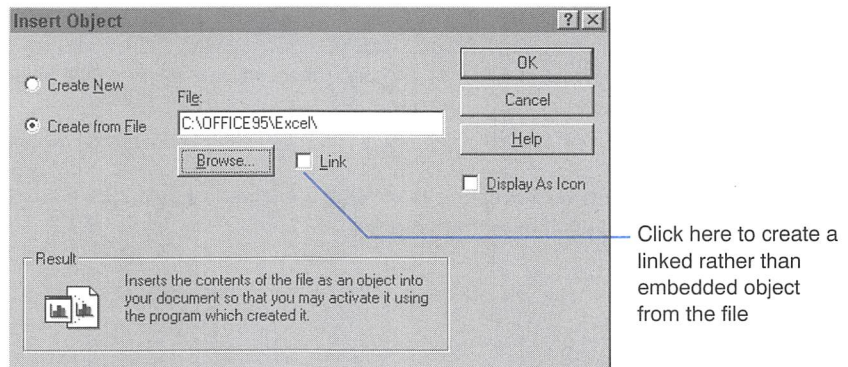
Harvard Graphics is the OLE container. Double-click either OLE object to launch its server program

Linking and Embedding Existing OLE Objects

Click **Insert New Object** on the Edit menu to link or embed an existing object in the Slide Editor.



Clicking **Create from File** changes the options in the Insert Object dialog box. Use the new options to either embed or link an existing file as an OLE object in the Slide Editor.



For online Help about:

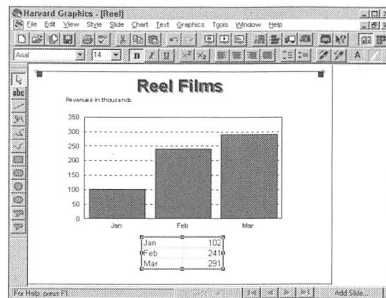
Embedding an existing OLE object on a slide

Click this index entry on the Help Index tab:

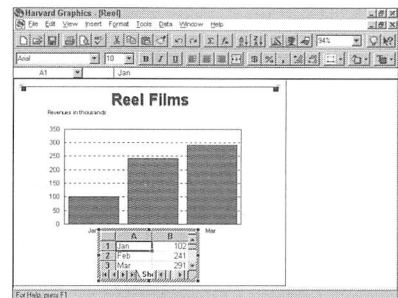
embedding objects

Linking and Embedding New Objects

To embed a new object: click **Create New** in the Insert Object dialog box. The server program selected in the Object Type list opens. For programs that support in-place editing, it will appear that you are creating the new object without leaving Harvard Graphics. An object that you can edit in-place has a hatched border around it. Changes made to an object that you edit in-place are automatically applied to the object in Harvard Graphics.



Excel spreadsheet edited in-place



If the server program does not support in-place editing, it opens a separate window where you edit the object.

To link a new object: open the server program and create the object that you want to use in Harvard Graphics. Save the file and select and copy the object to the clipboard. Don't close the file. Click **Paste Special** on the Harvard Graphics Edit menu, then select **Paste Link**.



For online Help about:

Click this index entry on the Help Index tab:

Creating and embedding a new OLE object on a slide

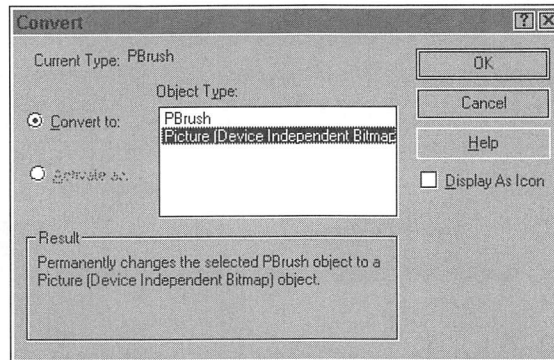
embedding objects

Creating and linking a new OLE object on a slide

linking objects

Converting an Object to a New Format

Once you embed or link an object in a Harvard Graphics slide, you can change its format or server program. Click **Object** on the Edit menu, then click **Convert to** to open a dialog box to convert a selected OLE object in the Slide Editor to a different type.



Selecting **Convert to** converts the selected OLE object and saves it in the format specified in the Object Type list.

Selecting **Activate as** allows you to choose an alternate program server to edit all objects that are of the same type as the selected OLE object.

Working with an Embedded or Linked Object

Working in the server program

Every OLE object has a *default action*, which is a common task for that program. For example, for a word processor or drawing program, the default action is to edit the object.

To start the default action while you're working in the Slide Editor: double-click the OLE object. The server program opens for you to work in it.

To start the default action while you're displaying a slide as a ScreenShow: click the object. The server program opens for you to work in it. When you are finished, close the server program to continue the ScreenShow.

Some OLE server programs provide additional actions.



Note

- ◆ When you finish work on a linked object, it's a good idea to click **Save** before you return to Harvard Graphics.

After you return to Harvard Graphics, you can click **Undo** and **Redo** on the Edit menu if you change your mind about work done in the server program for an embedded object.



For online Help about:

Selecting the action for an OLE object embedded in a slide

Click this index entry on the Help Index tab:

default OLE action

Working with an OLE Object in Harvard Graphics

You can change the appearance of a linked or embedded object. You can cut, copy, and paste OLE objects to and from Harvard Graphics and other programs. You can also drag and drop objects to and from programs that support OLE2.

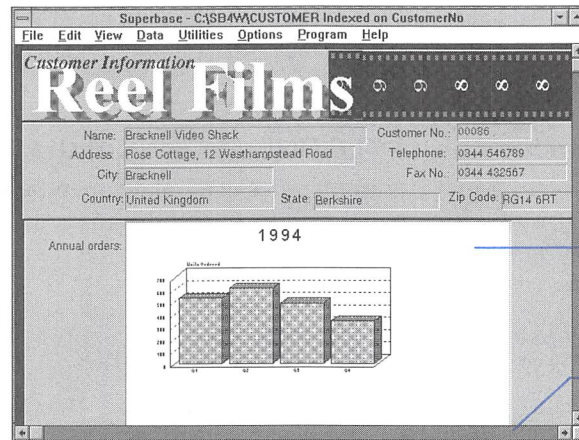
If you cut or copy:	And paste it:	The object is pasted as:
One OLE object	As an OLE object into another program that supports OLE	An OLE object but might lose any attributes you assigned it using Harvard Graphics
One OLE object	Into a Harvard Graphics slide	An OLE object and keeps any attributes you assigned it using Harvard Graphics
An OLE object and any other type of object	Into any other program	A picture or bitmap
An OLE object and any other type of object	Into a Harvard Graphics slide	An OLE object and keeps any attributes you assigned it using Harvard Graphics

Linked objects keep their links to the server program when you cut, copy, paste, and drag them.

When you display a slide with an OLE object in a ScreenShow, you can set options to have the object appear with the timing you want. (For example you could have a sound file play automatically when a slide is drawn.) You can also hide an OLE object when you display a slide as a ScreenShow.

Linking and Embedding Slides (OLE Server)

This section describes how to embed or link Harvard Graphics slides in an OLE container (destination) program—Harvard Graphics as a server for OLE objects.



One slide shows in the container, but you can link or embed multiple slides

The database form is the container (destination)

You can edit slides or display them as a ScreenShow without leaving the container

To embed a Harvard Graphics slide in a container program: open a Harvard Graphics presentation in the Slide Sorter view, then cut, paste, copy, or drag the slide or slides to the open container.



To link a Harvard Graphics slide: select the slide or slides you want from the Slide Sorter view, then click **Copy** on the Edit menu. In the open container program, choose the appropriate options to paste a link. This varies for different programs. For example, you might click **Paste Special** on the Edit menu, **Harvard Graphics slide(s) object** in the **Data type** list that appears, and then the **Paste Link** button.



Notes

- ◆ Some container programs might not fully support working with slides as described in this section. See the documentation of a container program for information about how that program handles OLE.
- ◆ You can embed a slide with DDE links to another program. To do so, click **Options** on the Tools menu and make sure **Keep data links** is selected on the **Defaults** tab of the Options dialog box.



For online Help about:

Click this index entry on the Help Index tab:

Embedding slides in another program

embedding slides

Editing and Playing Slides in Container Programs

You can edit or play Harvard Graphics slides that are linked or embedded in container programs. Double-click the visible slide in the container to open the Harvard Graphics Slide Editor and edit any of the linked or embedded slides.

To play a Harvard Graphics slide in a ScreenShow, select it in the container program, click **Presentation Object** on the container program's Edit menu, then click **Play**.

Returning to the Container after Editing or Playing Slides

After playing a Harvard Graphics ScreenShow, when you close the last slide, you return automatically to the container file.

Click **Save** on the Harvard Graphics File menu to save any changes you make to a linked slide, then return to the container program.

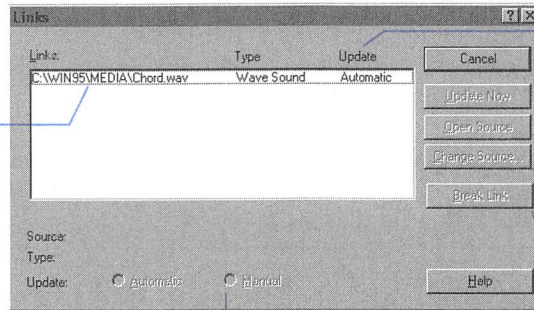
To change the slide that's shown in the container for a linked object: if the container program allows it, click **Links** on the container program Edit menu and edit the slide number in a Links dialog box. If you can't do this, return to Harvard Graphics and link to the file again, selecting and pasting a different slide to be visible.

Working with Links



To view link information, click **Links** on the Edit menu or click the icon. The Links dialog box lists all DDE and OLE links.

Location of selected linked data or object



Shows whether a link is **Automatic**, **Manual**, **Unavailable** (broken), or **Static**

Click to open the server program

Click to fix an **Unavailable** link or to change topic and item information for an OLE or DDE link

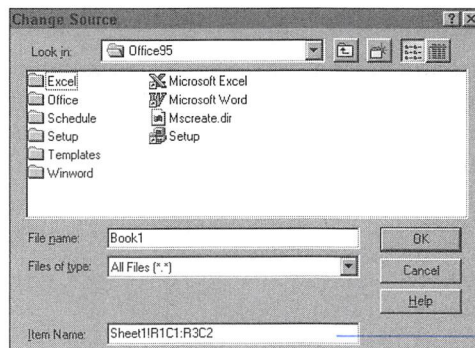
Click **Manual** if you want to control when data or an object is updated in Harvard Graphics

If you click this and break a link, the OLE object or DDE data status is **Static**

Fixing Broken (Unavailable) Links

If Harvard Graphics tries to re-establish a DDE or OLE link and can't, the update status is **Unavail** in the Links dialog box. You can change the link information to restore the connection between Harvard Graphics and the server program, or change link information for other reasons.

To change link information: click the link you want to fix or change, then click **Change Source**.



The location of data

After you change the link, Harvard Graphics changes the information and updates the data or object in Harvard Graphics.

**Note**

- ◆ After pasting a chart with a DDE link, the link is unavailable and must be reactivated. Re-establish the link in the Change Source dialog box.

Opening a Presentation with an Existing Link

When you open a presentation with an existing DDE or OLE link to another file, if the server file and server program are both open, Harvard Graphics automatically updates the linked data or object without any confirming message. (Even if the DDE or OLE link is the Manual type, the update is automatic in this situation.)

If both the server program and the file aren't open, a message appears asking if you want to update the links. You can choose whether to update the data or object. Click **Yes** if you want all linked data or objects updated or **No** if you don't.

If you choose: This happens:**Yes**

If Harvard Graphics can open the server program and file, the link is re-activated. If Harvard Graphics can't open the server file and program, you see a message that the link can't be completed. You can try to fix the link as explained in the previous section.

No

Harvard Graphics opens the presentation with the data or object last saved with the Harvard Graphics file. The links are not reactivated.

**Note**

- ◆ You can also link data that you import into a Harvard Graphics Data Form. The message asking if you want to update links appears when you open a presentation with an import link. See page 6-5 "Linking the Data."

1. The first part of the report is a general introduction to the subject of the study.

2. The second part of the report is a detailed description of the methods used in the study.

3. The third part of the report is a discussion of the results of the study.

4. The fourth part of the report is a conclusion and a list of references.

5. The fifth part of the report is a list of appendices.

6. The sixth part of the report is a list of figures and tables.

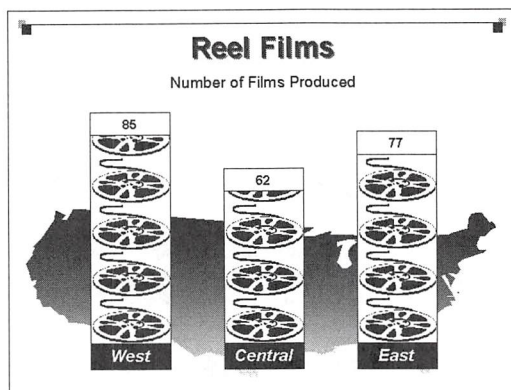
Working with Graphics and Text

This Chapter Describes:

- ◆ Using text and objects (such as a polygon, rectangle, or circle) in your slides (page 8-2)
- ◆ Editing text annotations (page 8-4)
- ◆ Using a spelling checker (page 8-5)
- ◆ Using clip art (page 8-5)
- ◆ Working with objects and text. This includes moving, copying, aligning, rotating, and grouping (page 8-8)
- ◆ Changing the way objects and text look. This includes changing attributes (such as color) and fill style (such as gradient or bitmap), and copying attributes (page 8-10)
- ◆ Converting a chart to an image (page 8-16)

The Basics

Use text and graphics (such as text annotations, drawings, clip art, and image files) to emphasize a point, direct the audience's attention, or make a presentation more appealing.



From the Slide Editor, you can add graphics and text to a slide, the master template, a slide template, a background image, the handouts master, and speaker notes.



For online Help about:

Click this index entry on the Help Index tab:

Adding graphics to slides

graphics

Adding text annotations to slides

text annotations

Copying clip art to a slide

clip art

Importing an image file

importing

Adding Graphics

Use buttons on the Drawing toolbar and items on the Graphics and Edit menus to add graphics in the Slide Editor. For example, you can click buttons on the Drawing toolbar to create squares, circles, rectangles, and other shapes.

Click **Insert New Object** on the Edit menu to add an object created in another program; for example, Windows Paintbrush or Harvard F/X. You can also import bitmap image files and other image files and add them to slides.

Adding Text



Use the Text button on the Drawing toolbar to add a text annotation to a slide. Text annotations appear in printed output, in a ScreenShow, and when you preview the slide; they don't appear in the Data Form or the Outliner.

Click the slide where you want the text to start. A text box with placeholder text appears.



A text box is like a simple text editor. In a text box, you can edit text (insert, copy, move, and delete), set the text alignment, set tabs, and change attributes such as color and size. As you type in the text box, the text wraps within the box to the next line.

A text block is all the text in a text box. If you resize a text block, the text flows to the new boundary, but the font size remains the same. The height of the text box fits the number of lines you type.



For online Help about:

Click this index entry on the Help Index tab:

Resizing a text block
Selecting text
Adding text
Editing text

text annotations

Showing a text box ruler

rulers

Working with Text

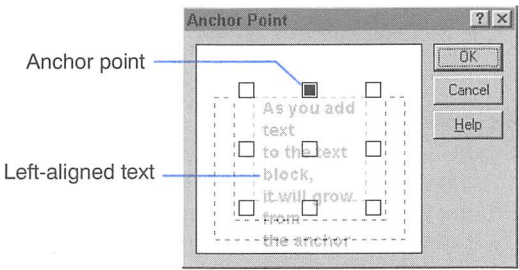
In the Slide Editor, you can edit text annotations, text charts, and slide titles directly on the slide. If you change text in the Slide Editor for text charts and slide titles, the changed text appears in the Data Form and the Outliner.

Click options from the Text menu to do the following:

Alignment - make text left-justified, right-justified, or centered in a text block. If you click **Full**, the first character in a line of text is left-justified and the last is right-justified. You can have only one alignment setting within a text block.

Spacing - set the number of lines or points between lines of text or paragraphs on a slide.

Anchor Point - set an anchor point for text in a text block. An anchor point specifies where text starts and “grows” from in a text block. For example, titles have a top-center anchor point. As you add text to a title, the text grows from the center of the text block out and down.



For online Help about:

Click this index entry on the Help Index tab:

Selecting text
Moving text
Editing text

text annotations

Aligning text

aligning text

Setting the anchor point

anchor point

Checking Spelling

The spelling checker comes with a *master* dictionary (HGMASTER.DIC) and a *personal* dictionary (HGCUSTOM.DIC). The spelling checker looks for corrections of misspellings, repeated words, and incorrect capitalization in the main dictionary first, then in the personal dictionary.



Notes

- ◆ You can use a personal dictionary from other applications such as Microsoft Word.
- ◆ If you edit the master or personal dictionary using a word processor, you must save it as DOS text or in ASCII format.



For online Help about:

Click this index entry on the Help Index tab:

Using a personal dictionary

spell checking

Adding Clip Art

Clip art are ready-made drawings that you can add to slides.

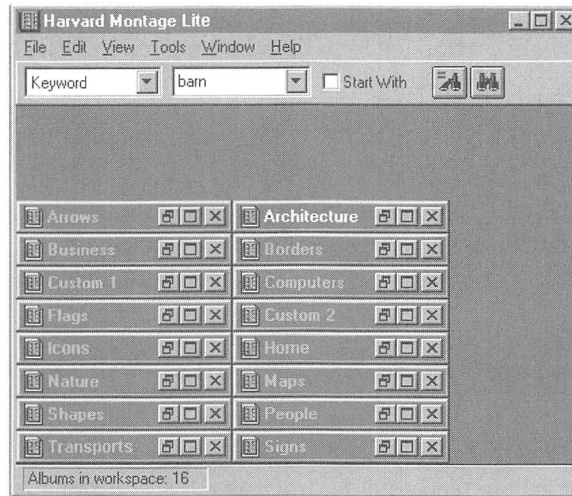


Clip art



Click **Clip Art** on the Graphics menu or click the button to open a window containing albums of clip art that you can add to a slide. Harvard Graphics includes albums containing more than 500 clip art images. The clip art is arranged in albums according to subject matter.

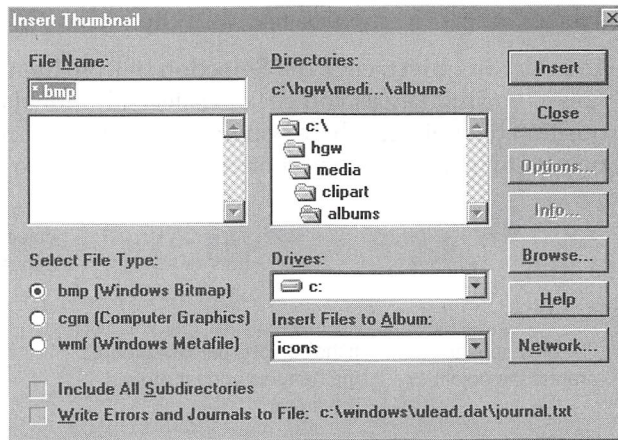
For more information about a piece of clip art, right-mouse click on its thumbnail image, then click **Properties**. Click **Album Information** from the View menu for details about the album.



You can copy or drag clip art from an album to a slide in the Slide Editor, or to the master template, a slide template, a background image, the handouts master, or speaker notes.

To change albums in the Harvard Montage Lite window, click **Open** on the File menu. In the File Name list, click the filename of the album that you want to see, then click **OK**.

To add your own clip art to an album, click **Insert Thumbnails** on the Edit menu. You can add clip art in files with the extensions .BMP, .WMF, and .CGM. Any clip art you add to Harvard Montage Lite can be dragged to Harvard Graphics.



For online Help about:

Viewing clip art
Copying clip art to a slide
Adding new clip art to a Montage Lite album

Click this index entry on the Help Index tab:

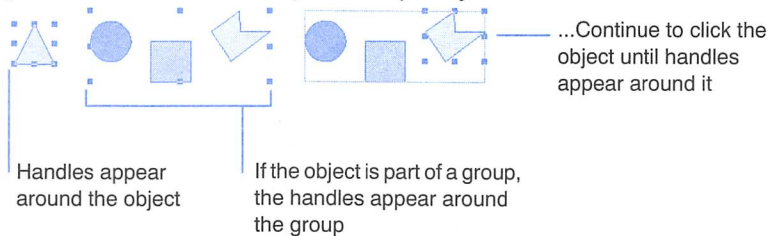
clip art

Working with Objects

In the Slide Editor, graphics, text, and clip art are treated as objects. You can work with text annotations, slide titles, text in title and bullet charts, and clip art like any graphical object. Unless otherwise specified, the term “object” refers to graphics, text, and clip art.



To select an object: click the **Selection** button, then click the object. Hold down the Shift key as you click to select additional objects. You can also position the pointer where you want to start a selection box, then drag the pointer to include the object or objects you want to select.



Click options from the Graphics menu or click buttons on the toolbar to do the following:



Group and Ungroup - treat several objects as a single object. When you select any object grouped with other objects, handles appear around the entire group.



Move - move objects that are hidden beneath other objects. Click **Move to Front** to reveal the object or **Move to Back** to move it behind the object you want to reveal. If several objects overlap, you can move one forward or backward one position at a time by clicking **Move Forward by One** and **Move Backward by One**.



Rotate - rotate an object around its center point. If you select multiple objects, they rotate around the center of the selection box.



Flip - flip an object around its center point horizontally or vertically. If you select multiple objects, they flip around the center of the selection box.



Align - align objects in relation to the selection box that surrounds them or space them evenly. You can align selected objects horizontally, vertically, or center them in a selection box or on the slide.



Edit points - edit an object. Clicking this button causes the object to change to an outline. Drag the edit handles that appear at each control point to edit the object.



For online Help about:

Click this index entry on the Help Index tab:

Selecting objects

selecting objects

Moving objects

moving objects

Resizing objects

resizing objects

Skewing objects

skewing objects

Editing objects

objects, editing

Rotating an object

rotating objects and text

Cutting and Pasting

You can cut, copy, paste, and drag and drop objects between Harvard Graphics and other programs. The objects can be in ASCII text, Bitmap format, or Picture format.

If the clipboard contains a file in *both* Bitmap format and Picture format, Harvard Graphics pastes the Picture format. To paste the Bitmap format, click **Paste Special** on the Edit menu, or fill an object with the bitmap image. See page 8-13 "Fill Styles."



Notes

- ◆ An object you paste or drag from Harvard F/X into Harvard Graphics is an embedded OLE object, which you can move and resize. To edit the OLE object in Harvard F/X, double-click it. See page 7-8 “Working with an Embedded or Linked Object.”
- ◆ The item listed next to **Paste** on the Edit menu is the default format of the cut or copied object, for example, a drawing (Harvard Graphics drawing or text), or a bitmap (Windows bitmap).

<u>U</u> ndo	Ctrl+Z
Cu t	Ctrl+X
<u>C</u> opy	Ctrl+C
Paste Bitmap	Ctrl+V
Paste <u>S</u> pecial...	
Cle a r	Del
Selec <u>t A</u> ll	Ctrl+A
<u>F</u> ind...	Ctrl+F
Replac <u>e</u> ...	Ctrl+H
Insert <u>N</u> ew Object...	

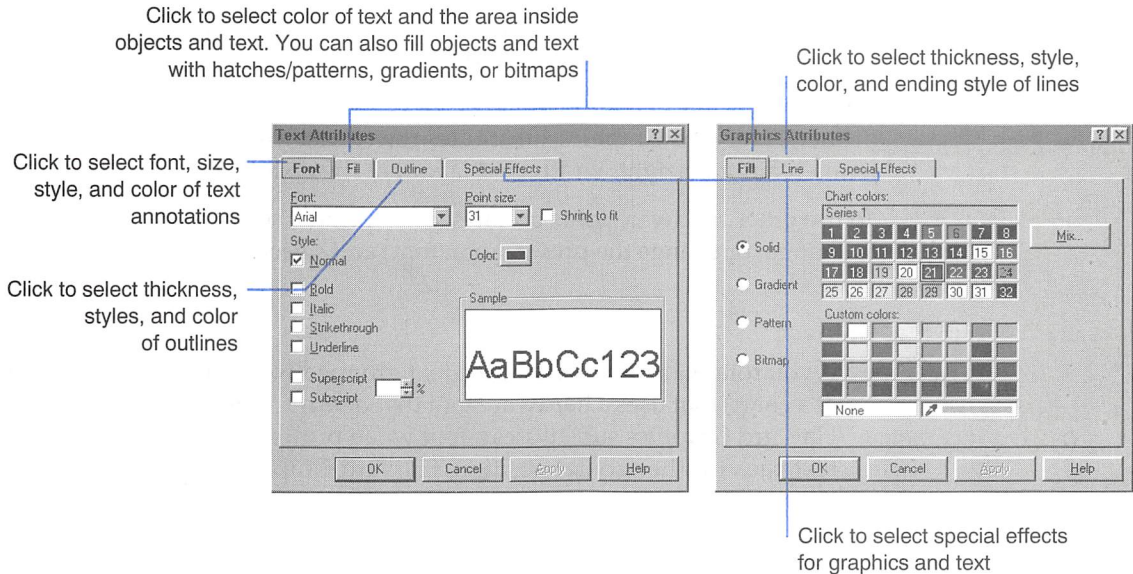
- ◆ When other formats are available, **Paste Special** is available on the Edit menu. For example, if the default format is an OLE object and you don't want to embed an OLE object, click **Paste Special** and select another format in the **Paste As** list.

Changing the Appearance of Text and Objects

Click **Graphics Attributes** on the Graphics menu and use the Graphics Attributes dialog box to change the appearance of object outlines and fill, and to add special effects to graphical objects.

Click **Text Attributes** on the Text menu and use the Text Attributes dialog box to change the appearance of outlines and fill for text, add special effects, and change fonts. Text can include text annotations, text in text charts, slide titles, and data chart text such as labels, legends, and values. You can change the attributes of a whole text block or a portion of a text block.

With the exception of the **Font** tab on the Text Attributes dialog box, the tabs on each dialog box allow you to perform similar actions on a graphical object and text. For example, you can change the fill color of a graphic object using the Graphics Attributes dialog box, or change the fill color of text using the Text Attributes dialog box.



If you change attributes of a graphical object or text, the new attributes apply to any selected object or text, and to any subsequent object or text you add (except bitmap fills).

- ◆ You can't change the attributes of an object pasted from the clipboard in Picture format. You can change Windows metafiles (.WMF) that are imported.



For online Help about:

Click this index entry on the Help Index tab:

Changing text font

text attributes

Changing graphics and text fill

objects, filling
text, filling

Changing line and outline attributes

line attributes
text, outlining

Creating special effects

special effects

Fonts

Use the **Font** tab of the Text Attributes dialog box to set the font, size, style, and color of text. Harvard Graphics supports these types of *scalable* fonts:

- ◆ TrueType fonts (check with your driver developer to determine if the driver you use supports TrueType fonts)
- ◆ Printer and film recorder hardware fonts (such as PostScript and PCL), which come with your output device driver

If you create a presentation using printer hardware fonts and then change printers, Harvard Graphics substitutes the closest matching available font to maintain the height, width, and layout of the text on-screen.

To use other hardware fonts on the second printer, select the text you want to change (or change the presentation font) and select an available hardware font.



Note

- ◆ If you rotate, flip, or stretch text (text grouped with an object, or as part of a chart) that uses a hardware font that doesn't support these attributes, Harvard Graphics substitutes a font when printing. If you reposition the text back to a horizontal position, Harvard Graphics uses the original hardware font.

Even when a font is substituted for the hardware font, the hardware font type remains selected in the Font menu, the Text Attributes dialog box, and the Change Presentation Font dialog box until you change the font.

Point Size

You can set the size of text from 4 to 512 points. Text is printed in the size you select. If you display the slide in its default size (fit in window), Harvard Graphics scales the text size relative to the whole slide.

Click **Shrink to fit** on the **Font** tab of the Text Attributes dialog box to fit text within the boundary of the text box. If you add lines of text, the text size becomes smaller.



Note

- ◆ If you resize an organization or data chart, the text size changes to maintain the chart layout. If you group text with an object and resize the group, the text size changes as well.

Text Styles

You can change selected text to bold, italic, strikethrough, underline, superscript, or subscript by selecting options on the Text Attributes **Font** tab or clicking buttons on the Attributes toolbar.

Normal *Italic* **Bold**

~~Strikethrough~~ Underline

Sub_{script} Super^{script}

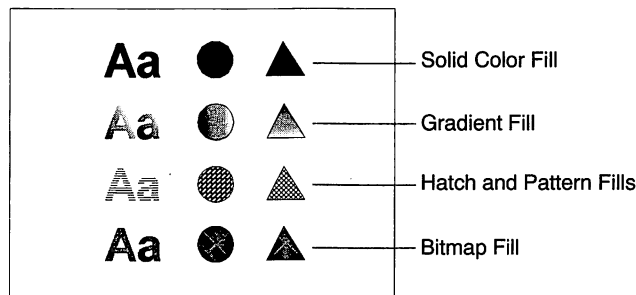
ANSI Characters

To copy and paste extended and special characters into a Harvard Graphics slide, use the Windows Character Map utility (to use Character Map, click the Windows **Start** button, click **Programs**, click **Accessories**).

In Character Map, select the same font you use in Harvard Graphics. See your Windows documentation for more information. Some characters might not print, or might be replaced by other characters, depending on your printer and installed fonts.

Fill Styles

Use the **Fill** tab of the Graphics Attributes or Text Attributes dialog box to change the fill or outline color of an object or text.



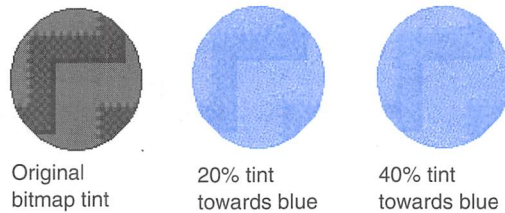
Solid Color: Fill an object or text with a solid color, or change the color of an object or text outline. Use a custom color if you want the color to remain fixed, a chart color if you want the color to match the chart element.

Gradient: A gradient is a smooth progression from one color to another. You can select the gradient colors and angle of the gradient pattern.

Hatch and Pattern: Hatches are made up of lines; patterns are bitmap pictures. Hatches work best for plotters; you can use hatches or patterns for other output devices.

Bitmap: A bitmap is a dot-by-dot representation of a picture that's saved in a file. You can fill any object on your slide (including chart elements such as bars and pie slices) with a bitmap. Harvard Graphics uses bitmaps in .BMP, .GIF, .PCX, .PCC, .PCD, and .TIF formats. The way a bitmap appears depends on your computer system's graphics card and monitor, the original size of the bitmap, and on the output device.

Click **Bitmap** on the **Fill** tab of the Graphic Attributes dialog box and select options to stretch bitmaps horizontally and vertically and to tint bitmaps towards different colors.



Tinting a bitmap by percents towards a new color



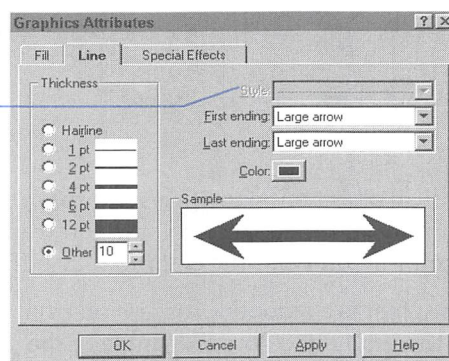
Note

- ◆ If you rotate an object that's filled with a gradient, pattern, or bitmap, the fill doesn't rotate with the object.

Line Attributes

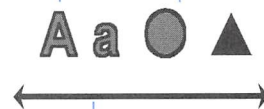
Use the **Line** tab on the Graphics Attributes dialog box or the **Outline** tab on the Text Attributes dialog box to change line attributes (such as thickness, style, and color) and the outline of an object or text.

Line styles are available when you select Hairline line thickness



Text with 4 point outline thickness

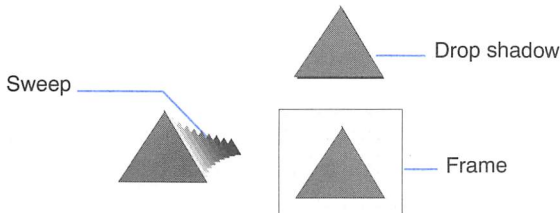
Object with 6 point outline thickness



Line with 10 point thickness and large arrow endings

Special Effects

Use the **Special Effects** tab of the Graphics Attributes or Text Attributes dialog box to add special effects to text, objects (including grouped objects), charts, and bitmaps.



Copying Attributes

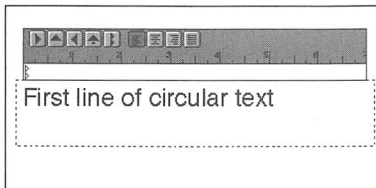


Use the Eyedropper to copy attributes (such as color, pattern, or line style) from one object to another.

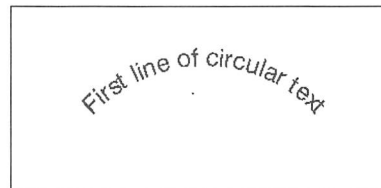
To quickly set any attribute for new objects, select an object that has the attributes you want. Its attributes apply to any new objects you draw.

Creating Circular Text

In the Slide Editor, select a text block, then click **Circular** on the **Special Effects** tab of the Text Attributes dialog box.



If a text box has one line of text,
or text that's wordwrapped...



...It looks like this as circular text



Notes

- ◆ Harvard Graphics uses the first text line in a text block. Additional lines of text, bullet symbols, tabs, and text alignment are ignored.
- ◆ If the length of the text line exceeds the circumference of the circular path, the text overlaps.



For online Help about:

Creating circular text

**Click this index entry on the
Help Index tab:**

circular text

Converting a Chart to an Image

You can convert a table, organization, or data chart to an image to manipulate it like any other graphical object—for example, to rotate the chart, or ungroup it and move the data labels.

After you convert a chart to an image, it becomes a group of objects—chart data is no longer associated with the image. Save the chart in a presentation before you convert it, in case you need the actual chart and data later.



For online Help about:

Click this index entry on the Help Index tab:

Converting a chart to an image

charts, converting to images

Designing the Look of a Presentation

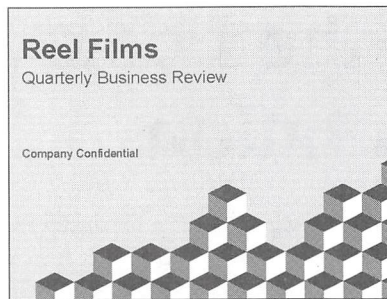
This Chapter Describes:

- ◆ The presentation styles that come with Harvard Graphics (page 9-2)
- ◆ Changing presentation styles (page 9-2)
- ◆ Using templates to give your presentation a consistent look (page 9-4)
- ◆ Working with the master template to make changes to every slide in your presentation (page 9-5)
- ◆ Working with slide templates to make changes to specific chart types (page 9-6)
- ◆ Changing the background fill (page 9-11)
- ◆ Changing the background image of a slide (page 9-11)
- ◆ Changing the palette for a presentation style (page 9-12)

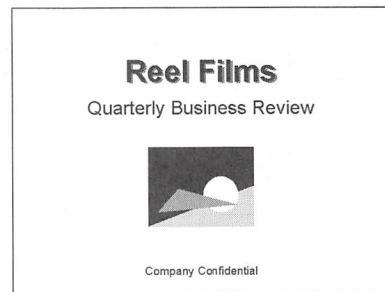
Working with Presentation Styles

A *presentation style* is made up of the master template (which affects all slides in a presentation), slide templates (which affect slides of specific chart types, such as pie or bullet charts), background images, and color palettes.

Harvard Graphics comes with a variety of presentation styles (.ST4 files). Each standard presentation style has its own palette file of the same name (for example, the palette for BLUGRID.ST4 is BLUGRID.PL). The presentation styles can be reproduced on any printing device.



GRYCUBE.ST4



SHAPES.ST4

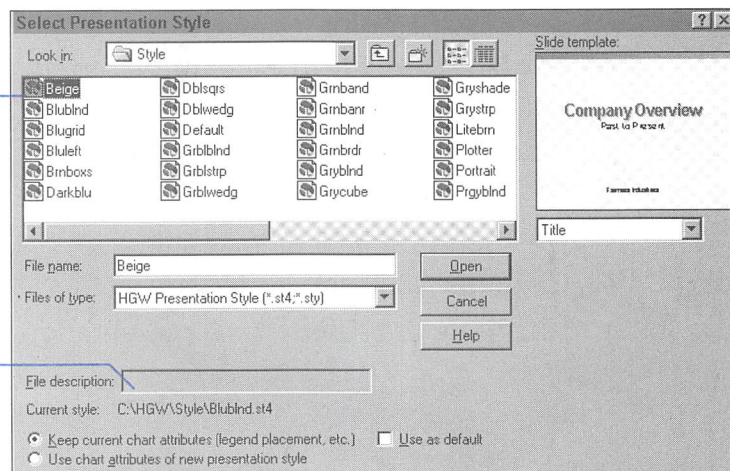
Presentation styles have different looks

Changing to a Different Presentation Style

Click **Select Presentation Style** on the Style menu to change a presentation style.

The current presentation style

Description of the background fill and design elements used in the style



If you change a presentation's style, Harvard Graphics uses the style's:

- ◆ Orientation
- ◆ Master template, which is applied to all slides
- ◆ Slide templates, which are applied to the slides that use them
- ◆ Color palette(s) for the master template and slide templates. Both chart and custom colors in the palette(s) change to the new colors. The new chart colors are reflected in the chart elements
- ◆ HyperShow buttons on the master template and slide templates
- ◆ Background images

If you change the presentation style, the following items don't change:

- ◆ Chart attributes (chart, series, legend, frame, grid, axis, and labels), unless you click **Use chart attributes of new presentation style**
- ◆ Existing slide templates or background images with unique names
- ◆ Objects and text you added to individual slides
- ◆ Objects colored with custom colors from the previous palette



Notes

- ◆ If you want to use a different presentation style than the default for a new presentation, you can save a few steps by opening the style. Opening a presentation style (when no presentation is currently open) automatically starts a new presentation.

You can preview a presentation style by opening its (.STY or .ST4) file in QuickView. See page 10-14 "Using Quick View" for more information.

- ◆ When you open a presentation style (except PORTRAIT.ST4), the style sets the output device to **Display**, the presentation orientation to landscape, and margins to zero. When you open PORTRAIT.ST4, Harvard Graphics sets the output device to your default printer, the presentation orientation to portrait, and uses the printer's default margins. See page 11-3 "Setting Presentation Setup Options."
- ◆ To produce your presentation on a printer or film recorder, select the output device in the Print Setup dialog box *before* you start creating your slides.



For online Help about:

Choosing a presentation style for the current presentation
Changing the default presentation style

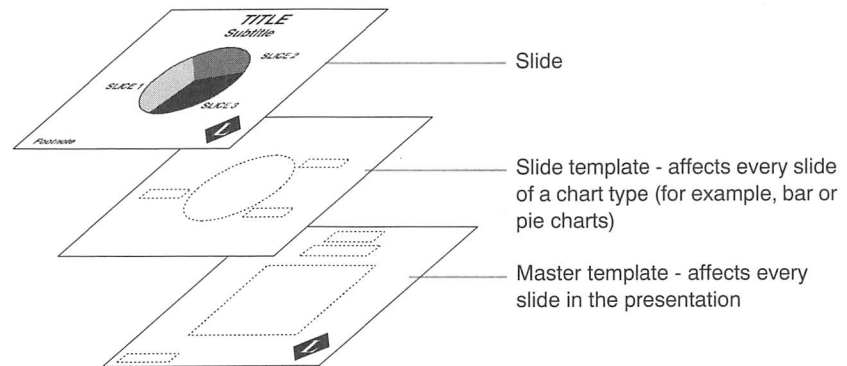
Click this index entry on the Help Index tab:

presentation styles

About Templates

Templates give slides a consistent, professional look. Each Harvard Graphics presentation style comes with a master template, standard slide templates (bullet, table, etc.), and custom templates for creating multiple charts (bullet/bar, pie/bar, bullet/bullet).

When you add a slide in a presentation, Harvard Graphics applies both the master template and the slide template for that slide type to the slide. Together, these templates create a look for the slide, containing information about the slide layout, chart type, and appearance of the chart on the slide (such as the background fill, colors, and background image used).

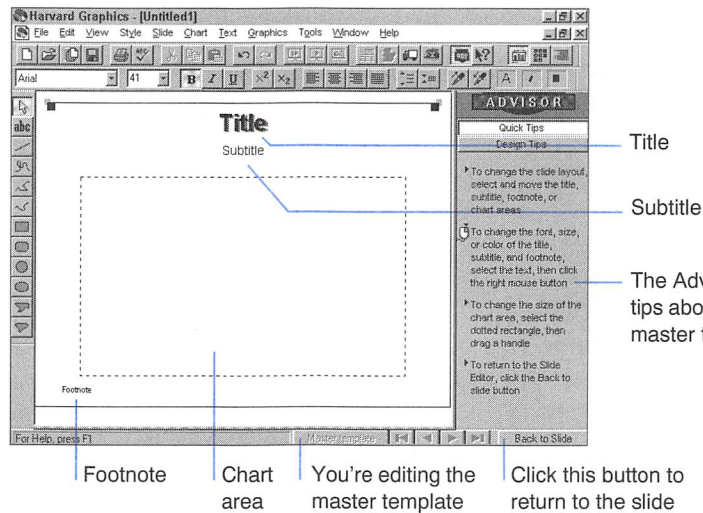


Click **Slide Templates** on the Style menu to preview the slide templates that come with Harvard Graphics. In addition to these templates, you can customize your own master template and slide templates.

Working with the Master Template

Use the *master template* to apply a change to every slide and slide template in your presentation. For example, you can add your company logo to every slide by adding it once on the master template.

To change the master template, click **Edit Master Template** on the Style menu.



The master template controls the following elements on a slide:

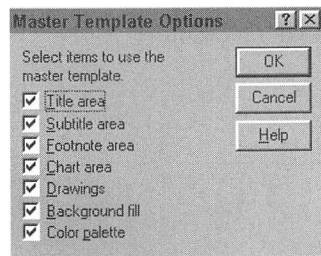
- ◆ Font, style, point size, color, location, and anchor point of the title, subtitle, and footnote. If you add title, subtitle, and footnote text on the master template, it overrides any title, subtitle, or footnote text on individual slides
- ◆ Location and size of the chart on the slide
- ◆ Background fill
- ◆ Color palette

Text and objects (like a time or filename stamp, HyperShow button, or OLE object) you add to the master template appear on each slide. Any objects you add to the master template can be edited on the master template only.

The master template doesn't control text and objects added directly to a slide, slide template, or background image.

Adopting the Master Template

Click **Adopt Master Template** on the Slide menu to select which items on individual slides you want to override. If you don't want an element on an individual slide controlled by the master template, deselect options in the Master Template Options dialog box. For example, if you placed a piece of clip art on the master template, but don't want it to appear on a particular slide, display the slide in the Slide Editor, then deselect **Drawings** on the Master Template Options dialog box.



Note

- ◆ If you change a slide background fill or color palette, or move or resize the title, subtitle, footnote, or chart area, the appropriate master template option is automatically deselected. If you change an attribute of the title, subtitle, footnote, or chart area (such as the color of the title, or selecting a 3-D chart option), the master template option remains selected.

Working with Slide Templates

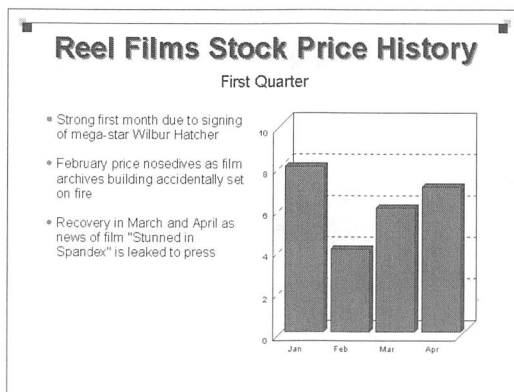
Use a slide template to make changes that affect only slides of a specific chart type (such as a pie chart or vertical bar chart).

Each slide template contains the same information as the master template (except that title, subtitle, and footnote text added to a slide template doesn't overwrite text on an individual slide). In addition, a slide template controls the following elements on a slide:

- ◆ Chart type (bullet, pie, and so on)
- ◆ Chart attributes: series, legend, grid, frame, axis, labels
- ◆ Text and graphics attributes (such as font, style, size, and color)
- ◆ Background images

Multiple Chart Templates

Each presentation style comes with custom templates for a bullet/bar, a bullet/bullet, and a pie/bar multiple chart.



A multiple chart template preserves the layout of more than one chart on a slide



Notes

- ◆ You can have only one bullet or organization chart on a slide. For example, the bullet/bullet custom template creates the second bullet chart using a text annotation.
- ◆ In the Slide Editor, when you add charts using **Add Chart to Slide** from the Chart menu, you need to manually adjust the layout of the charts on the slide. If you want to automatically control the layout of charts on the slide, use one of the standard multiple chart templates.



For online Help about:

Creating and applying multiple chart templates

Using slide templates

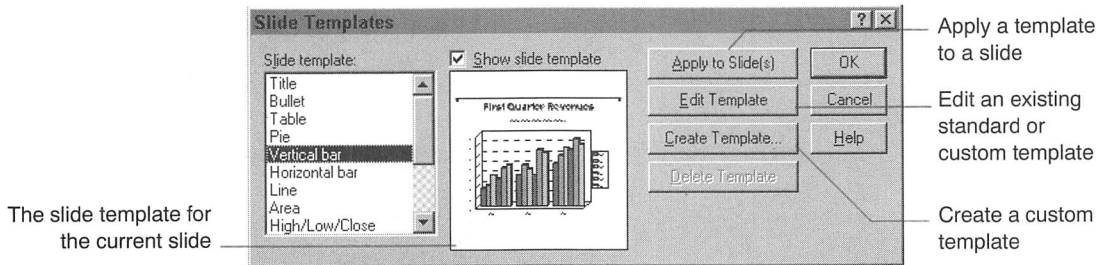
Click this index entry on the Help Index tab:

multiple charts

slide templates

Using a Customized Slide Template

Click **Slide Templates** on the Style menu to edit any standard or custom template shipped with Harvard Graphics or any custom template you create. Create a custom template for any slide you use frequently.



After you create and name a custom template, changes are applied to all slides that use that template in the current presentation. For example, if you edit the pie slide template, all slides with a pie chart are affected.

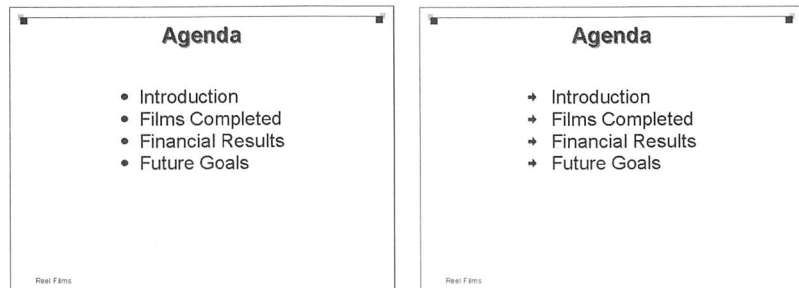


Notes

- ◆ If you edit a standard slide template, the original template is no longer available in your presentation.
- ◆ You can't add a chart to, delete a chart from, or change the chart type of a standard slide template. To have more than one chart on a slide, create a custom multichart template.

Applying a Customized Template

You can change the look of an existing slide by applying a slide template to it. For example, several bullet charts in your presentation might be created with the bullet slide template. You could manually change the bullets to arrows. Or you can make the changes on one bullet slide, then create a custom template to apply to each of the other bullet charts.



Apply a customized template to change a slide's design

To apply a custom template to an existing slide: with the slide displayed in the Slide Editor or selected in the Slide Sorter, click the **Apply to Slides** button in the Slide Templates dialog box.

To apply a custom template to a new slide: click the **Add Slide** button, select the custom template you want from the **Slide type** list, and create the chart.

Removing a custom template doesn't change the slides that use the template, but the template is no longer available to apply to other slides. Also, removing a template only removes it from the current presentation, not from other presentations.



For online Help about:

Click this index entry on the Help Index tab:

Editing a slide template

slide templates

Using a custom template in another presentation

custom templates

Adding a Date, Time, Filename, or Slide Number Stamp



Click the **Text** button, then click **Add Stamp** from the Text menu to add stamps to a slide, slide template, master template, background image, the handouts master, or speaker notes.

The *date* and *time* stamps show your computer system's date and time (they take their format from the Windows 95 Control Panel). These stamps are updated as you move from slide to slide in the Slide Editor, while displaying a ScreenShow, and when you open and print a presentation. The time and date aren't updated while you work on the slide or edit the master template.

The *filename* stamp displays the filename of the current presentation file.

The *slide number* stamp displays the number of the current slide. The slide number is updated as you move from slide to slide in the Slide Editor, reorder slides in the Slide Sorter, or display a ScreenShow.

Stamp:

Format:

Short date

05/12/96

Long date

May 12, 1996

Time

10:52 am

Filename

Myfile

Slide number

1



Notes

- ◆ You can add leading or trailing text (such as *Slide* for the slide number stamp).
- ◆ Delete the stamp as you would any other text in a text box.
- ◆ In a ScreenShow, use the **Replace** draw effect when using the slide number stamp. If you use the **Overlay** draw effect, each slide appears on top of the previous slide, and the numbering isn't displayed correctly.



For online Help about: [Click this index entry on the Help Index tab:](#)

Adding a stamp to all slides	stamps
----------------------------------------------	------------------------

Results of Applying a Template

The master template applies to every slide in a presentation.

A slide template applies to every slide of a chart type. A slide template overrides the master template for those master template options that are deselected.

The following table describes other results of changing the master template or a slide template. "Template" refers to both master and slide templates.

Element:	Changes in applying a template:
Text and graphics	<p>Objects (text or graphics) placed on the slide from the previous template are replaced with objects on the new template</p> <p>Objects added directly to the slide remain</p> <p>The fonts in the chart area (such as slice labels) change to the fonts in the template. Point sizes don't change; they adjust proportionately as the chart moves and/or is resized according to the template</p> <p>The font size of title, subtitle, and footnote areas match the template</p>
HyperShow buttons	<p>When you apply a template without a HyperShow button to a slide with a button, the slide's button remains, except if the chart type changes and the button is a chart element. For example, if a bar on a bar chart is a button and the bar chart is changed to a line chart, the button assignment is lost</p> <p>When you apply a template with a HyperShow button to a slide without one, the button is applied</p>

(continued)

Element:	Changes in applying a template:
Series data colors	Colors of the chart's series change to match the slide template. If the slide template has fewer series than the slide, the additional series on the slide repeat the series colors on the slide template. For example, if you apply a template with two series to an area chart with four series, Series 1 and Series 3 will both have the slide template color of Series 1, and Series 2 and 4 will both have the slide template color of Series 2
Table chart attributes	If the slide template has fewer rows or columns than the table chart, the additional data in the chart takes the attributes of the preceding row or column. Row attributes are applied first, then column attributes
DDE/OLE	When you apply a template to a slide with data linked to another application, the DDE link remains An OLE object linked or embedded on a slide remains

Changing the Background Fill

The background fill is an attribute of the master template and background image. You can change the background fill of all slides in a presentation, an individual slide, or slides that use a specific template or background image.

When you change the background fill of an individual slide or a slide template, the master template background fill option is automatically deselected in the Master Template Options dialog box. See page 9-6 "Adopting the Master Template."



For online Help about:

Changing the background fill

Click this index entry on the Help Index tab:

background fill

Working with Background Images

A background image is the "backdrop" (objects, text, clip art) that appears beneath the chart, text, and graphics you add to a slide. Each presentation style that comes with Harvard Graphics contains a background image named Default, which is used by all templates except the title slide template.

You can apply a background image to a slide or slide template. (You can't apply a background image in the Outliner or to a master template.) Edit or create a background image when you want to enhance the look of only those slides that use that background image.

When you work with objects on a background image, the colors come from the palette of the master template. If the master template color palette option is deselected, the current slide's color palette is used.

Click **Background** from the Style menu to change background images and their fill color.

Removing a Background Image

You can remove a background image if it hasn't been applied to any slides or slide templates in your presentation. If the background image has been applied, you must first apply a different background image to those slides.



For online Help about:

Creating a background image
Editing a background image
Applying a background image

Click this index entry on the Help Index tab:

background images

About Palettes

Click **Color Palette** on the Style menu to select a palette. A color palette is a set of complementary colors. Each presentation style's master template has its own color palette that's used for all slides in the presentation. You can use more than one palette in a presentation by applying a different color palette to slide templates or individual slides. You can also edit the colors in a palette.

Chart Colors and Custom Colors

A Harvard Graphics palette has two sets of colors: numbered *chart colors* and unnumbered *custom colors*.

Chart colors: Legend



Harvard Graphics identifies the chart element...

...When you click a chart color

Custom colors:



A palette contains chart colors and custom colors

A *chart color* is assigned to each element of a chart. Because you can change the palette of an individual slide, each slide in a presentation can have its own set of chart colors.

Custom colors are fixed colors that you can apply to chart elements or graphic objects. If you use a custom color, the element or object retains its color, even if you apply a new palette or edit the current one. All Harvard Graphics palettes use the same custom colors.

Applying a Different Palette

When you change a presentation's palette, Harvard Graphics changes each chart element color to the corresponding numbered chart color on the new palette. For example, if the title color (number 1) is yellow and you change to a palette in which color 1 is red, the chart title changes to red.



Notes

- ◆ If an object uses a chart color and you change the palette, the object's color changes to the chart color on the new palette.
- ◆ If you edit the palette of a slide, the chart colors change for that slide.
- ◆ If you edit the palette of the master template, chart color changes affect all slides and slide templates in the presentation.
- ◆ When you edit a palette, your changes affect only the current presentation



For online Help about:

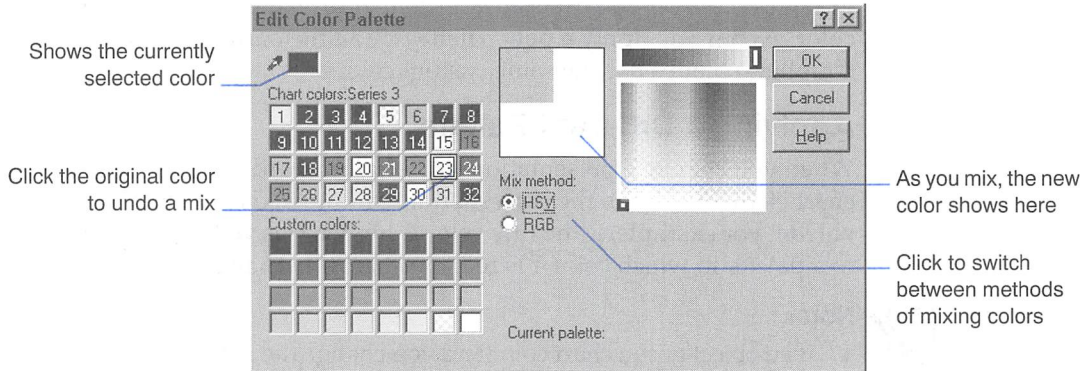
Changing a color's palette

Click this index entry on the Help Index tab:

color

Mixing Colors

Harvard Graphics provides two methods to mix colors. You can adjust the hue, saturation, and value of the color. You can also adjust the proportions of red, green, and blue that make up the color.



You can also change a palette's colors by using the Eyedropper tool to copy colors within and between palettes.



For online Help about:

Mixing colors
Copying a color

Click this index entry on the Help Index tab:

color

Creating and Displaying a ScreenShow

This Chapter Describes:

- ◆ Starting a ScreenShow (page 10-2)
- ◆ Moving around in a ScreenShow (page 10-3)
- ◆ Using Chalk while displaying a ScreenShow (page 10-4)
- ◆ Using speaker notes while giving a presentation (page 10-4)
- ◆ Adding visual effects between slides (page 10-6)
- ◆ Creating a self-running or continuous ScreenShow (page 10-7)
- ◆ Using Autobuild to create chart buildups (page 10-8)
- ◆ Creating an interactive HyperShow. This includes running other programs from within a ScreenShow (page 10-9)
- ◆ Adding sound effects, such as music and voice (page 10-12)
- ◆ Using OLE objects in a ScreenShow (page 10-14)
- ◆ Using Quick View to display a presentation on a system that doesn't have Harvard Graphics (page 10-14)
- ◆ Conferencing with others (page 10-15)

Starting a ScreenShow

A ScreenShow is a presentation you display on your computer screen one slide at a time. The slides appear full-screen on your monitor.

You can start a ScreenShow in any view beginning with the first slide or the current slide of the presentation. It might take a moment for Harvard Graphics to display each slide. After the last slide, Harvard Graphics returns to the view you were in when you started the ScreenShow. The last slide displayed in the ScreenShow becomes the current slide.



To view a ScreenShow from the first slide: in any view, with your presentation open, click **ScreenShow from Beginning** on the View menu, or click the button.



To view a ScreenShow from the current slide: in any view, with your presentation open, click **ScreenShow from Current Slide** on the View menu, or click the button.



Note

- ◆ If you plan only to display your presentation as a ScreenShow (you won't be printing it), click **Display** as the device in the Print Setup dialog box. See page 11-4 "Setting Print Setup Options."

You can import or open Harvard Graphics 3.0 DOS ScreenShows (files with the .SH3 extension). Click the **Upgrade Information** icon in the Harvard Graphics program folder for more information.



For online Help about:

Click this index entry on the Help Index tab:

Displaying a ScreenShow on a local computer

ScreenShows, displaying

Moving Around in a ScreenShow

You can use *default* keys and mouse buttons to control a ScreenShow.

Press:	To:
Right mouse button	Display the next slide
Left mouse button	Display the previous slide
Backspace	Display the last slide shown. For example, if you branch from slide 3 to slide 6 in a HyperShow and then press Backspace, you return to slide 3.
Left Arrow	Display the previous slide from the current one. For example, if you branch from slide 3 to slide 6 in a HyperShow and then press Left Arrow, slide 5 displays
End	Display the last slide in a presentation
Home	Display the first slide in a presentation
Esc or Break	Stop the ScreenShow
All others	Display the next slide

You can also click **Edit ScreenShow Effects** on the Slide menu, then select **Show navigation panel** to display a navigation panel that helps presenters move through the ScreenShow.



For online Help about:

Using the navigation panel to control a ScreenShow

Click this index entry on the Help Index tab:

navigation panel

Using Chalk

Use Chalk to make temporary annotations while displaying a ScreenShow. For example, you might want to draw a circle around a sales figure or underline a goal for added emphasis. Chalk annotations aren't saved with the slide.

Stock Quotes		
Film Stocks	Closing Price	Net Change
Reel	22.75	0.75
XKB	18.375	-0.675
Pyramid	12.75	1.5

Chalk annotations

When you display another slide, Chalk annotations are erased from the previous slide. To erase annotations while viewing the current slide, press F2.



For online Help about:

Using Chalk

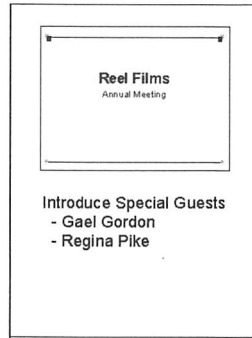
Click this index entry on the Help Index tab:

Chalk

Using Speaker Notes

Use speaker notes while giving a presentation to prompt yourself to elaborate on a piece of data, or to remind yourself of hidden buttons on a slide.

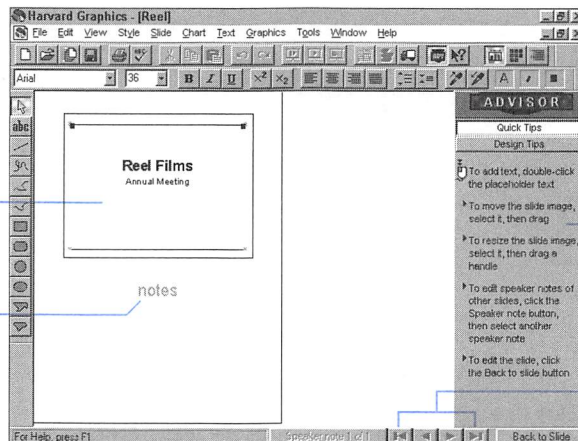
Speaker notes can be text, drawings, or clip art. When you print speaker notes, a thumbnail image of the slide appears on the page with the note. You can set up speaker notes to use a different output device, orientation, paper size, margins, and print options than your presentation slides.



To add or edit speaker notes: click **Edit Speaker Notes** on the Slide menu, or click the button.

You can move and resize the thumbnail image of the slide, but you can't edit it

Type notes over the placeholder text



Show the Advisor to see tips about editing speaker notes

Click this button to edit speaker notes on other slides, or click the slide navigation buttons



For online Help about:

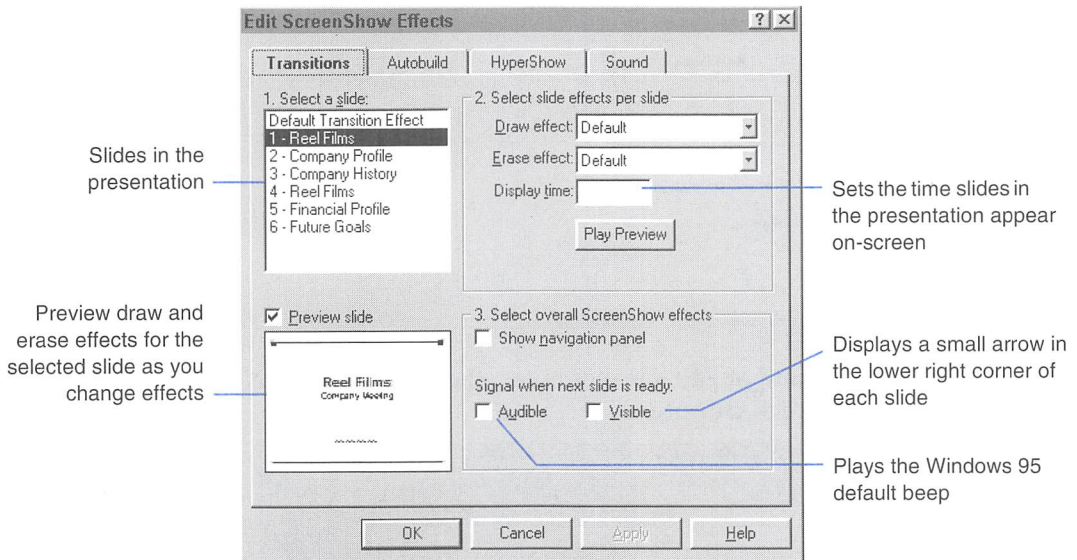
Adding speaker notes to a presentation
Printing speaker notes

Click this index entry on the Help Index tab:

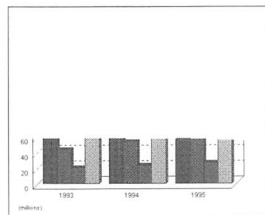
speaker notes

Adding ScreenShow Effects

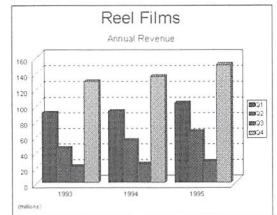
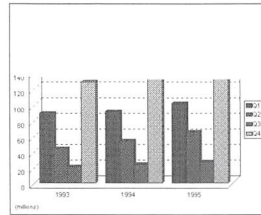
Click **Edit ScreenShow Effects** on the Slide menu to set slide and ScreenShow effects. (To change the order of the slides in your presentation, use the Slide Sorter.)



Transition effects are the special display effects used when drawing and erasing slides during a ScreenShow, for example, you can draw a slide from bottom to top.



Wipe up draw effect



You can set draw and erase transition effects and slide display times, globally (for the entire ScreenShow) or individually (for a single slide). Individual slide effects override the global effects you've set for the ScreenShow.



For online Help about:

Changing slide effects for a single slide
Changing global (default) slide effects

Click this index entry on the Help Index tab:

transition effects

Using Complementary Slide Effects

Select effects from the **Draw effect** and **Erase effect** lists that complement one another.

Erase a slide using:	Draw the next slide using:
Scroll right	Scroll right
Scroll left	Scroll left
Iris out	Iris in
Wipe up	Wipe down
Open horizontal	Close horizontal
Blinds left	Blinds left
Wipe left	Wipe left
Close horizontal	Open horizontal

Creating a Repeating ScreenShow

You can create a:

- ◆ *Self-running* ScreenShow that automatically advances to each slide, then begins again after displaying the last slide
- ◆ *Continuous* ScreenShow that waits for the viewer to press a key or click a mouse button to advance to the next slide, then begins again when the viewer advances from the last slide



For online Help about:

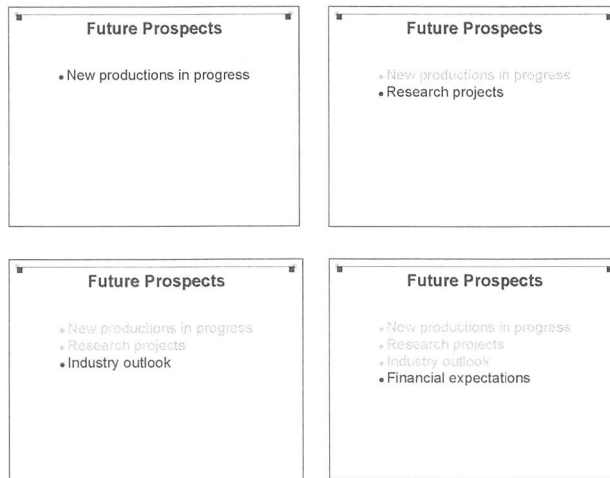
Creating a self-running ScreenShow
Creating a continuous ScreenShow

Click this index entry on the Help Index tab:

self-running ScreenShows
continuous ScreenShows

Using Autobuild

Use Autobuild to display the chart data of one slide as a series of buildups that gradually reveal more information, building up to the complete slide. Chart elements unaffected by the buildup (such as titles and annotations) appear on each buildup. No additional slides are created, and only the original slide is printed when you print the presentation.



An Autobuild bullet chart



Notes

- ◆ Autobuild works for all slide types except title, high/low/close, organization, and drawing. You can't use Autobuild on a slide that contains multiple charts.
- ◆ The draw effects, display time, and HyperShow links you set for the slide are applied to each of the buildups.



For online Help about:

Creating an Autobuild chart

Click this index entry on the Help Index tab:

Autobuild

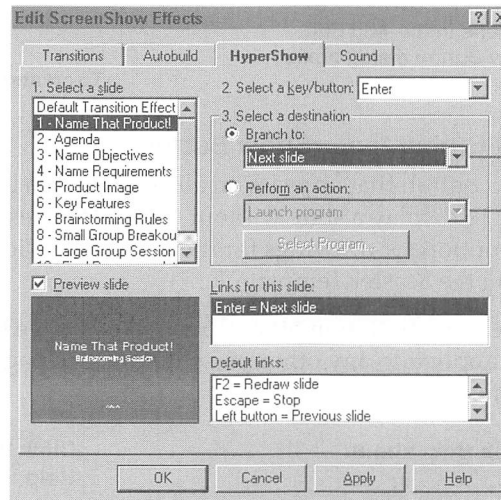
Creating a HyperShow

You don't have to show the slides in a ScreenShow sequentially—you can create an interactive HyperShow that lets the viewer select which part of the ScreenShow to see next. Create HyperShow links that assign keys, mouse buttons, or HyperShow buttons (objects on a slide) to branch to other slides and/or programs. For example, you could design your HyperShow so that the viewer:

- ◆ Presses the “M” key on the keyboard to display a menu slide
- ◆ Clicks the button labeled “Sales figures” on a slide to open a spreadsheet program

Assigning HyperShow Keys

Use the **HyperShow** tab on the Edit ScreenShow Effects dialog box to assign keys or mouse buttons that cause a branch to other destinations such as another slide or program. If you first click **Default Transition Effect** in the **Select a slide** list, the assignment applies to all slides in the presentation.



Assign this key to branch to this destination in a HyperShow

You can also assign a key to launch other programs, play sound files, or start an embedded or linked OLE action

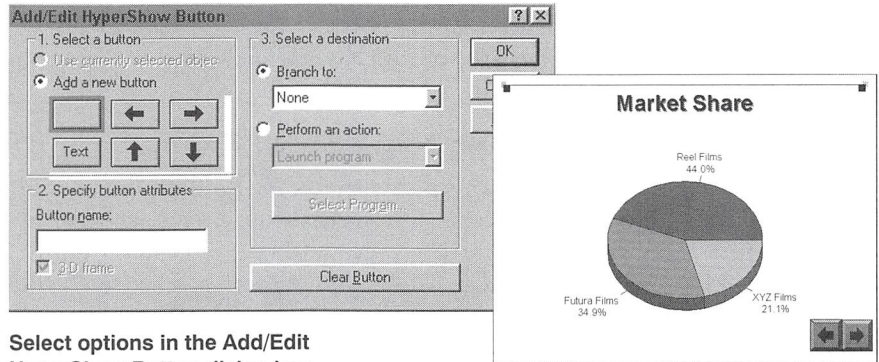


Note

- ◆ When you assign a destination for keys or mouse buttons in a ScreenShow, you might want to add text to the slide, background, or master template telling viewers the keys they can use to branch to other slides or programs. For example, add text on the master template that reads “Press F3 to return to the main menu.”

Creating and Assigning HyperShow Buttons

Click **Add/Edit HyperShow Button** on the Slide menu to create HyperShow buttons. A *HyperShow button* is an object you define and assign an action to. You can make a button from an entire chart or any object on a slide such as a pie slice, bars from one series, text, an object you draw, or clip art. Or you can choose a standard button. A slide can have an unlimited number of buttons.



Select options in the Add/Edit HyperShow Button dialog box...

...To create these HyperShow buttons

Creating Global HyperShow Buttons

To create a button that appears on all slides, add a button to the master template. To display a slide without the button, deselect the master template option for drawings for the individual slide. See page 9-6 "Adopting the Master Template."

To use the same button in other ScreenShows, save the presentation style and then apply it to any other presentation. See page 9-2 "Working with Presentation Styles."



For online Help about:

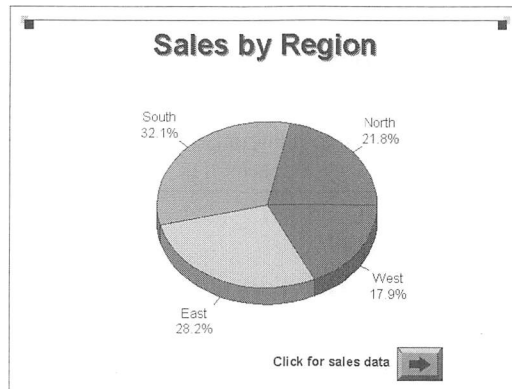
Assigning HyperShow keys
Creating HyperShow buttons

Click this index entry on the Help Index tab:

HyperShow buttons and keys

Running Programs from a HyperShow

You can assign a key or button in your HyperShow to run a program such as Microsoft Excel or Lotus 1-2-3. Run a program to show background data for Harvard Graphics charts, or to take advantage of another program's abilities without stopping your Harvard Graphics ScreenShow. You can run files with .EXE, .COM, .BAT, or .PIF extensions.



Notes

- ◆ When you run a program in a HyperShow, add a text annotation to the slide so users know what to expect when they click the button or press the key.
- ◆ If you try to open a Windows program that's already running, Windows might open a second copy, if the program allows it. If not, exit or minimize Harvard Graphics, close the program, and then return to Harvard Graphics and start the ScreenShow again.


If you run a non-Windows program from a HyperShow and receive an error message saying Windows can't find the program, you might need to create or edit a .PIF file for the program. See your Windows documentation for more information.

Assigning Sound to a Button

You can control the start of a sound file by assigning it to a HyperShow key or button. For example, you might want to display a bar chart showing sales performance. To focus on the top sales figure, play the sound of fireworks or applause with the press of a key or the click of a button. You might want to assign **Stop sound files** to another key or button.

Assigning OLE Actions

Harvard Graphics treats an OLE object like a HyperShow button with an OLE action assigned to it. You can change the default button assignment, select another action, or make additional key and button assignments for an OLE object and its related action.

 For online Help about:	Click this index entry on the Help Index tab:
Playing sound from a HyperShow key or button	sound
Running programs from a HyperShow	launching programs
Assigning an OLE action to a HyperShow key or button	HyperShow buttons and keys


Playing Sound in a ScreenShow

Click the **Sound** tab on the Edit ScreenShow Effects dialog box to attach sound files to a slide or slides in a ScreenShow.

Before you assign sound files and set play options, decide on the final order of the slides in your presentation. If you add a music and voice file to the same slide, both sound files will play at the same time.

To use the sound capabilities of Windows 95, you need:

- ◆ An MPC (Multimedia Personal Computer) standard sound board supported by Windows 95 (such as a ProAudio Spectrum board from Creative Labs or a SoundBlaster board from MediaVision) installed in your system
- ◆ A speaker or headphones to hear sound files
- ◆ Device drivers and hardware for any MCI devices and MCI programs you're using
- ◆ A microphone or other input device (such as a tape recorder) if you want to record your own voice files

 For online Help about:	Click this index entry on the Help Index tab:
Adding sound to a ScreenShow	sound

Types of Sound Files

Harvard Graphics supports two sound file types: *music files* and *voice files*.

Music files created with a Musical Instrument Digital Interface device (such as a synthesizer) are referred to as MIDI files and have a .MID extension. Music files can take up less disk space than voice files and are ideal for background music. You can't record a music file in Harvard Graphics.

Voice files are referred to as wave audio or waveform files and have a .WAV extension. Voice files can contain both speech and music (for example, you can record music from a compact disc in a voice file). You can record a voice file in Harvard Graphics.

Windows 95 comes with several .MID and .WAV files, and your sound board manufacturer might provide a library of sound clip files.



Note

- ◆ The distributors of sound files might own exclusive rights to them, and re-recording by any means could violate copyright laws.

To play a sound file, be sure that for the entire presentation the **Enable sound** checkbox is selected on the **Sound** tab of the Edit ScreenShow Effects dialog box.

Adding Animation and Video Effects

You can enliven a ScreenShow with video and animation clips.

Harvard Graphics comes with an animation player and video player and clips. If you choose **Typical** when installing Harvard Graphics, the players are installed in HGW\MEDIA\. If you choose **Compact**, you need to install the players separately. See page 1-3 "Installing Additional Files after a Compact Install."



For online Help about:

Click this index entry on the Help Index tab:

Adding animation effects

animation

Playing a video clip

video

Using OLE Objects in a ScreenShow

You can use Object Linking and Embedding (OLE) objects in a ScreenShow. For example, you might create a slide to summarize financial results and include two OLE objects on it—a music file and a spreadsheet—to dramatize and back up the chart data. You can set options so the music file plays or the spreadsheet opens to view the data when you display the slide. See page 7-5 “Linking and Embedding an Object in a Slide (OLE Container).”



For online Help about:

Using OLE objects in a ScreenShow

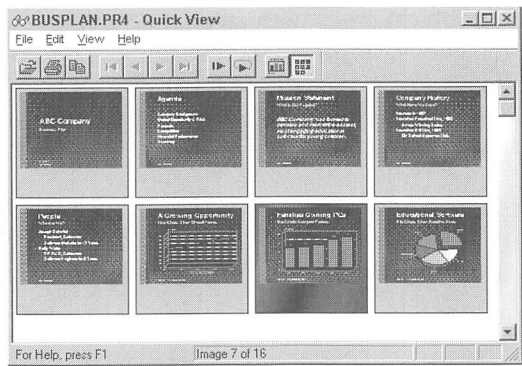
Click this index entry on the Help Index tab:

ScreenShows, using OLE objects

Using Quick View

Use Quick View to open and display a presentation or style file on a system that runs Windows 95, even if it doesn't have Harvard Graphics installed. You can use Quick View to display a presentation one slide at a time, as thumbnail images of the slides in the presentation, or as a ScreenShow.

To start Quick View, right-click on the icon for a Harvard Graphics presentation (files with .PRS, .PR4, .STY, or .ST4 extensions) in the Open dialog box. Click **Quick View** on the pop-up menu to see the presentation in Quick View.



Thumbnail view of presentation in Quick View

Click **ScreenShow** on the View menu to run either a manual or automatic ScreenShow. Use default keys and mouse buttons to move through the ScreenShow in manual mode. In automatic mode, each slide displays according to the display times set in the Edit ScreenShow Effects dialog box.

**Note**

- ◆ Quick View does not display Harvard Graphics ScreenShow features (for example, transition effects, HyperShow buttons and keys, sound and animations clips, etc.)

**For online Help about:**

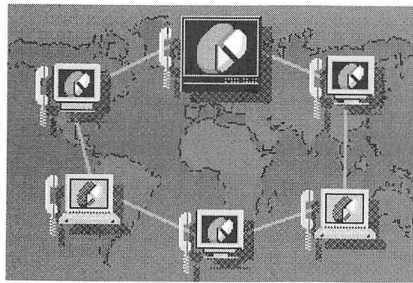
Click this index entry on the Help Index tab:

Viewing a ScreenShow on a computer without Harvard Graphics

ScreenShow, displaying

Conferencing

Through conferencing, you can display your Harvard Graphics presentation simultaneously on up to 64 computer systems that are connected by a LAN. Use conferencing when the audience for your presentation is in one or more remote locations, whether in different offices, buildings, or cities. Conferencing enhances the effectiveness of telephone conference calls by allowing conference attendees to view your presentation, not just listen to it.



The *moderator* sets up, starts, and closes the conference. An *attendee* is anyone who joins the conference. The *presenter* controls the mouse movements and slide changes. Initially, the moderator is the presenter; however, the moderator can give control of the presentation to an attendee.

**Note**

- ◆ To use conferencing, you must have a LAN that supports shared network drives and is NETBIOS compatible. Your computer must have the NETBIOS drivers loaded, and must be configured in Windows Setup to run under a network.

Setting Up a Conference

Click **Conference** on the Tools menu, then **Setup** to set up a conference. The moderator sets up the network connection for the conference. The moderator needs read, write, create, and delete access to the shared network location where the presentation files are copied; attendees need read access. On some networks, the moderator can restrict who joins the conference by requiring attendees to type the password for the shared network drive.

- ◆ If you display a presentation on a network server that doesn't support long filenames, Harvard Graphics truncates the filename of the presentation to five characters, then adds the ~ character and a one-digit number. For example, PRESENTATION.PR4 is truncated to PRESE~1.PR4. If you have many presentation files that begin with the same five characters, their truncated names may conflict with one another when you try to display them in a conference.



For online Help about:

Setting up a conference

Click this index entry on the Help Index tab:

conferencing

Starting a Conference

Click **Conference** on the Tools menu, then **Start** to start a conference. The conference moderator starts the conference. Before starting a conference, the moderator should let attendees know:

- ◆ When the conference will start
- ◆ The name of the conference
- ◆ The password (if required)



Notes

- ◆ To communicate freely during the conference, set up a telephone conference call with each attendee.
- ◆ Harvard Graphics creates a temporary directory on the network, \CONF.HGW\CONFNAME where CONFNAME is the name of the conference. Harvard Graphics copies the .PR4 file, any bitmap files not saved with the presentation file, and any sound files associated with the presentation to the directory. If you must specify a temporary directory other than \CONF.HGW, contact Harvard Graphics Technical Support.

- ◆ If your presentation launches programs, copy the program and data files to the temporary directory.
- ◆ You can start a conference from a presentation that's a linked OLE object in another program. Be sure to save any changes before you start the conference. You can't start a conference from a presentation that's an embedded OLE object. See page 7-10 "Linking and Embedding Slides (OLE Server)" for more information.



For online Help about:

Click this index entry on the
Help Index tab:

Starting a conference

conferencing

Conference Moderator Commands

Press Esc to view the Conference Moderator Commands dialog box any time during a conference.

As people join the conference, their names appear in the **Attendee List**, along with a message showing they've just joined. The Conference Moderator Commands dialog box displays how many additional people may join the conference. When you click a name, the attendee's phone number appears below the **Attendee List**. If you set up a telephone conference call, include anyone who's joined the conference in the call.

Click **Close** to return to the ScreenShow. If you're the presenter, you'll have control of the mouse movements and slide changes. When you advance to the next slide, a hand appears on-screen until all attendees have the slide on their screens.

Sending and Reading Messages

Use messages sparingly so as not to interfere with the flow of the presentation. All participants in the conference can send messages to each other. You can't print or save messages.

You can forward a message you received to another attendee. First read the message, then select an attendee to send it to and click **Send Message**.

When a message is received on your system, you'll be prompted either visually or audibly.

Giving Control to a New Presenter

The moderator is the conference's first presenter, but can give control of the ScreenShow to any attendee. For example, the presentation might be a cross-site team effort and the moderator can give control to a co-presenter.

Only the moderator can choose a new presenter. Once control has been given to an attendee, the moderator can either take back control or give control to another attendee.

Closing a Conference

Only the moderator can close a conference. To close the conference, click **Close Conference**.

When the conference ends, Harvard Graphics returns to the view each attendee was in before joining the conference. The temporary directory and the presentation files are deleted from the network and the network connection is disconnected, if they didn't exist before starting the conference.

For more information about sending and reading messages and passing control of the conference to other presenters, click the **Help** button on the Conference Moderator Commands dialog box.

Joining a Conference

Click **Conference** on the Tools menu, then **Join** to join conference.

Here's what you need to join a conference:

- ◆ Harvard Graphics for Windows
- ◆ The name of the conference
- ◆ The password of the network drive (if it's required)
- ◆ Read access to the shared network location set up by the conference moderator



For online Help about:

Joining a conference

Click this index entry on the Help Index tab:

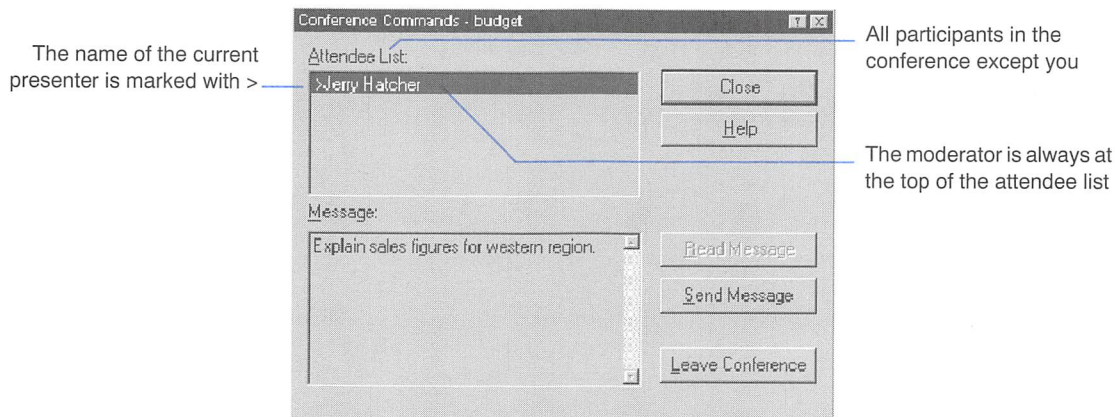
conferencing



Note

- ◆ If several connections are made to the conference at the same time, you might be asked to try joining at a later time.

Conference Attendee Commands



Press Esc to view the Conference Commands dialog box any time during a conference. Click **Close** to return to the ScreenShow.

Sending and Reading messages

See page 10-17 "Sending and Reading Messages" for more information.

Becoming the Presenter

To become the presenter, notify the moderator (you can send a message). Only the moderator can designate a new presenter. Once you become the presenter, you control the mouse movements and slide changes during the presentation.

Before you can leave the conference, the moderator must take back control or designate a new presenter.

Leaving the Conference

Attendees can leave the conference whenever they wish, as long as they aren't the presenter. (If you're the presenter, the moderator must take back control.) To leave the conference, click **Leave Conference**.



Note

- ◆ If you're the presenter and the moderator is unable to take back control (for example, if the moderator's network goes down), press Alt+F4.



For online Help about:

Conferencing tips

Click this index entry on the Help Index tab:

conferencing tips

Dear Mr. [Name]

I am writing to you

in regard to the

matter of the

contract for the

purchase of the

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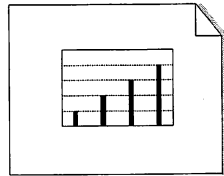
Printing

This Chapter Describes:

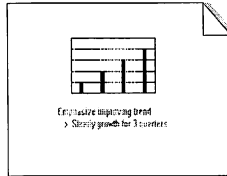
- ◆ Setting up your Harvard Graphics presentation for output (page 11-2)
- ◆ Printing your presentation. This includes printing a presentation outline and chart data, and printing to a file (page 11-5)
- ◆ Formatting and printing handouts (page 11-7)

The Basics

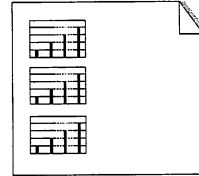
You can print a presentation in three output formats: *slides*, *speaker notes*, and *handouts*. Slides and speaker notes print one slide per page. Handouts can contain several slides per page.



Slides



Speaker notes



Handouts

To print a presentation:

- ◆ Set up an output device to print the presentation
- ◆ Set presentation setup options (for example, page orientation, margin and paper sizes) that affect the look of the presentation both when displayed on-screen and when printed
- ◆ Set print setup options (for example, print using a black and white palette) that affect printing speed and the look of your printout

When you save a presentation, Harvard Graphics saves the options you set for each output format. You have to set up your presentation for printing only once.



Note

- ◆ In Windows, all output devices are considered to be “printers”. In this chapter, *print* refers to all types of output, unless indicated otherwise.

Setting Up an Output Device

Before you can set up an output device in Harvard Graphics, its driver must be installed in Windows. If Harvard Graphics can't find the printer that's selected for the current presentation, it substitutes an available printer, or you can set up another one.



Note

- ◆ Set up the output device you want to use *before* you add text and objects to your first slide, especially if you plan on imaging your presentation to a film recorder. The presentation's overall appearance when printed (such as margins and hardware fonts) depends on the device. You can change the device at any time; however, the appearance of existing slides, handouts, and speaker notes could change.

About Print Drivers

Every device interacts with Harvard Graphics through a file called a *driver*. Windows provides drivers for common output devices. Several devices might use the same driver.



Notes

- ◆ Software Publishing Corporation doesn't write Windows drivers; contact Microsoft or your device manufacturer to obtain new or updated drivers.
- ◆ If you call Product Support for assistance with output issues, you might need to provide the name and version number of the driver you're using.



For online Help about:

Click this index entry on the Help Index tab:

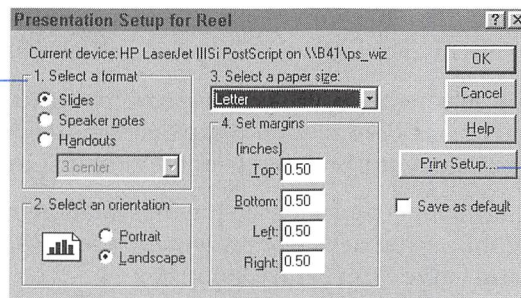
Finding the driver's version number

driver version

Setting Presentation Setup Options

Click **Presentation Setup** on the File menu to set options that affect the look of your presentation or printout. Change paper and margin size only if you aren't going to select a different output device in the Print Setup dialog box.

Speaker notes and handouts can have a different orientation than slides

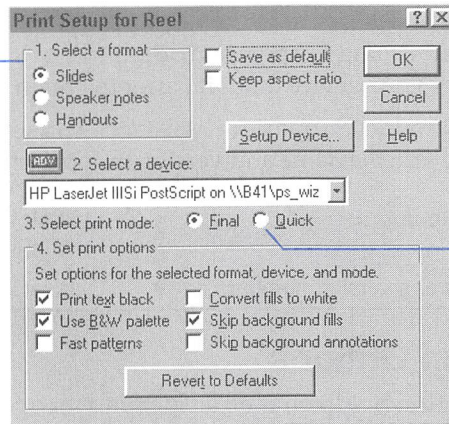


Click here to set printer options

Setting Print Setup Options

Click **Print Setup** on the File menu or in the Presentation Setup dialog box to select an output device and set options that affect printing speed and the look of your printout.

You can set different print options for each output format



Click **Quick** to print faster than **Final**. Final mode produces the best looking output, but might take longer to print

Harvard Graphics sets the optimal print options according to the output device and print mode you selected. If you want to override these default options, select new ones in the **Set print options** checkboxes.

When you select a new device, Harvard Graphics uses the paper size and margins set in the Presentation Setup dialog box, if the new device supports them. If not, Harvard Graphics uses the closest supported settings.

To keep the layout of all slides in the presentation in proportion when changing the output device or presentation setup options, select **Keep aspect ratio** in the Print Setup dialog box.



For online Help about:

Setting up printing for the current presentation
Setting up default printing

Click this index entry on the Help Index tab:

printing presentations

Previewing a Printout

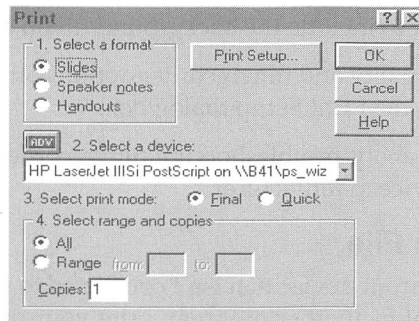
Click **B&W Preview** on the View menu to get a good idea of how the current slide will look when you print it on a black and white printer. Press any key to return to the slide.

If you selected a printer (black and white or color) as your output device in the Print Setup dialog box, Harvard Graphics uses the currently selected print options in **Final** print mode to preview the slide on your screen. If **Display** is selected in the Print Setup dialog box, or if you don't have a printer selected or installed, Harvard Graphics uses the default settings for a generic black and white printer in **Final** print mode.

Printing a Presentation



Click **Print** on the File menu, or click the button.



You can print one slide per page, one slide and speaker notes per page, or several slides on a handout.

Harvard Graphics uses the print options that were set previously for the device in the Print Setup dialog box, or it uses the default print options. If you change the output device, Harvard Graphics uses the paper size and margins set in the Presentation Setup dialog box, if the new device supports them. If not, Harvard Graphics uses the closest supported settings. To make changes to paper size and margins, click **Presentation Setup** on the File menu.



Note

- ◆ Changes you make for device and print mode in the Print dialog box are used for the current work session only.



For online Help about:

Printing slides
Printing presentations

Click this index entry on the Help Index tab:

printing slides

Recording a Presentation on Film

Presentations that are imaged to a film recorder should be created with the film recorder set up as the output device.

In the Presentation Setup dialog box, set all margins to zero to use as much of the output area as possible. Deselect **Skip background fills** in the Print Setup dialog box to include the background fill on all slides.

To change film quality and film recorder options other than paper size, click **Setup Device** in the Print Setup dialog box.

For information about troubleshooting film recorder setup or output, contact your device manufacturer.

Printing to a File

To print on an output device that isn't connected to your computer, or to use your slide output in another program, print your presentation to a file.

Print to an .EPS file to place a slide in a desktop publishing program. You must install a driver for your PostScript printer in Windows before you can print to an .EPS file. To print a presentation in .EPS format, you must print each slide individually.

You can also export the contents of a presentation to other graphics file formats, such as .CGM and .WMF. See page 6-9 "Exporting Slides as Image Files" for a complete list.

See your Windows documentation for more information about printing.

Printing Handouts

You can print up to six slides on a handout page. Print handouts to give your audience a condensed copy of your presentation, or to print a draft of your presentation. A handout includes a border around each slide and any text annotations or graphics you add.

You can set up handouts to use a different output device, orientation, paper size, margins, and print options than your presentation options.



For online Help about:

Click this index entry on the Help Index tab:

Selecting a layout for handouts

handouts

Adding text and drawings to handouts

Printing handouts

Printing Tips



- ◆ If you change the margins so that the height and/or width of the slide is greater than the default margins of the device, Harvard Graphics resizes chart elements on the slide correctly, but text annotations retain their original size and position. Use the **Selection** button to resize and move the annotations.
- ◆ When printing transparencies, click **Quick** print mode.

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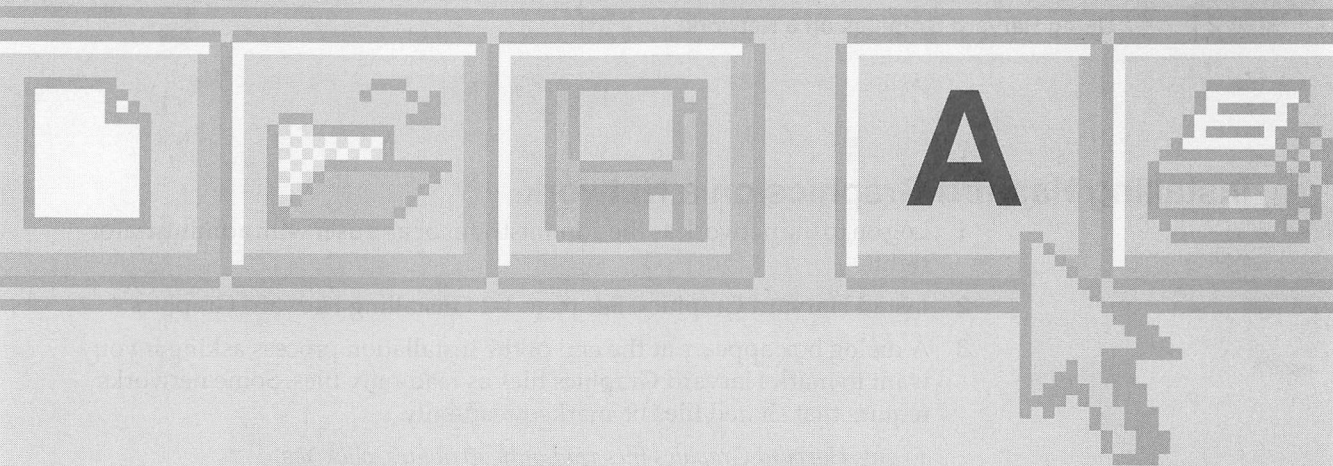
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Using Harvard Graphics on a Network

This Appendix Describes:

- ◆ Installing Harvard Graphics on a network (page A-2)
- ◆ Running the LAN User program before using Harvard Graphics on the network (page A-2)

Installing Harvard Graphics on a Network

- 1 Log on to the network as the administrator or as a user with administrator rights.
- 2 Install Harvard Graphics. See page 1-2 "Installing Harvard Graphics."
- 3 A dialog box appears at the end of the installation process asking if you want to mark Harvard Graphics files as read-only files. Some networks require that shared files be marked read-only.

To give Harvard Graphics files read-only attributes, click Yes.

Running the LAN User Program

Each network user must run the LAN User program before using Harvard Graphics.

- 1 Connect to the network directory where the Harvard Graphics program files are installed.
- 2 In Windows 95, click **Run** from the Start menu, type the path followed by **\lanuser.exe**, and click **OK**.

*For example, type **I:\hgw\lanuser.exe** and click **OK**. If you're unsure of the location of LANUSER.EXE, click the **Browse** button.*

- 3 In the Harvard Graphics LAN User dialog box, click **OK**.

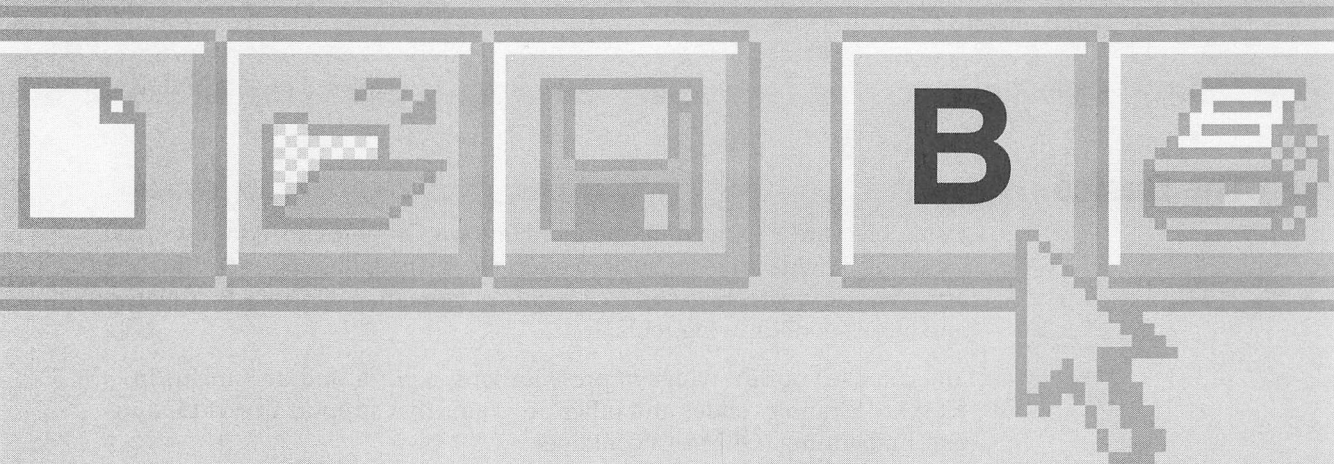


Follow the instructions on the screen. You're ready to use Harvard Graphics on the network. To start Harvard Graphics in Windows, double-click its icon.



Note

- ◆ The LAN User program copies the personal dictionary file (HGCUSTOM.DIC) into the user-specified local data directory.



Using Harvard F/X

This Appendix Shows You How to:

- ◆ Install and begin working in HF/X (page B-2)
- ◆ Create text and objects (page B-7)
- ◆ Apply Quick F/X to text and objects (page B-20)
- ◆ Change color of text and objects (page B-29)

The Basics

Using Harvard F/X, a component of Harvard Graphics for Windows, you can apply a wide range of custom effects to the text, objects, and bitmapped artwork you create. Harvard F/X includes more than 30 Quick F/X features and a full set of drawing tools.

You can use your drawings in presentations, reports, and documents in Harvard Graphics slides and other programs that support Object Linking and Embedding (OLE) as a container.

Installing Harvard F/X

If you installed Harvard Graphics using the **Typical** option, Harvard F/X was installed too, and its icon appears in the Harvard Graphics program folder.

To install Harvard F/X, run the Harvard Graphics installation program again. Use the **Custom install** option and select **Harvard F/X**. See page 1-3 “Installing Additional Files after a Compact Install.”

Working in Harvard F/X

Here are a few important things to know about the Harvard F/X program:

- ◆ You work on one page. The screen is like a piece of paper on which you draw objects, type text, and apply special effects.
- ◆ You click a tool for a task in the toolbox, then move the pointer onto the page and click or drag to create or select something.
- ◆ As you work in dialog boxes, you also can click **Apply** to see possible results on-screen without closing the dialog box.
- ◆ You can choose **Undo** repeatedly on the Edit menu, reversing up to 16 previous steps.

Starting Harvard F/X

There are three ways to start Harvard F/X:



- ◆ In Harvard Graphics, click the **Harvard F/X** button on the toolbar
- ◆ In the Harvard Graphics program folder, double-click the Harvard F/X icon
- ◆ In OLE container programs, click **Insert Object** on the Edit menu. Click **Harvard F/X Drawing** in the object type list

When you begin Harvard F/X, a startup window appears. The window varies slightly depending on how you start the program.

- 1 Click **Create new drawing** for new work or **Open existing drawing** to get a drawing you saved.
- 2 At the blank page, begin your drawing.

Saving a Drawing

When you save, the palette, unit of measure, text attributes, display settings, and other attributes are stored in the file.



- 1 If you started Harvard F/X from the Harvard Graphics program folder, choose **Save** on the File menu or click the Save button.
- 2 Type a filename and click **OK**. Your drawing is saved and the filename appears in the title bar. An .HFX extension is added automatically if you don't type one.

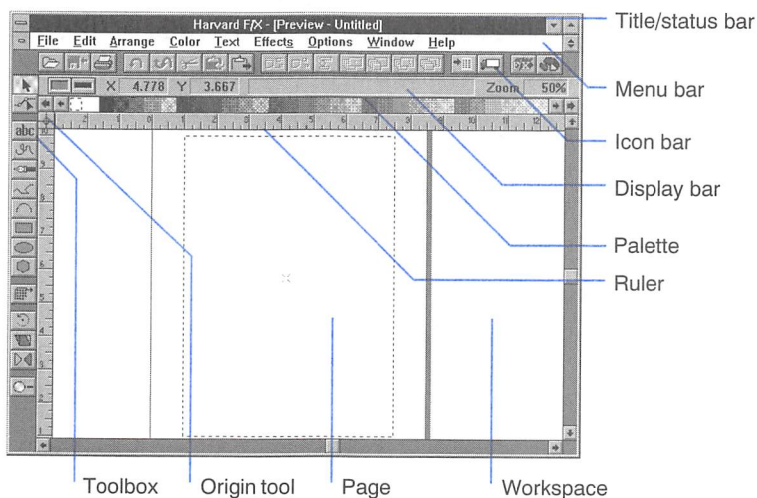


Note

- ◆ If you started Harvard F/X from Harvard Graphics or another program to insert an embedded object, **Update** appears in place of **Save**. Choose **Update** to embed the object in the container program. Choose **Save copy** as to save a Harvard F/X version of the file.

Harvard F/X Workscreen

The workscreen includes the page and margins for your drawings, as well as menus, tools, palettes, and rulers.



Item:	Purpose:
Title/status bar	Shows the current filename, window view, and status information about tools, icons, and menus
Menu bar	Click a menu to show its commands
Icon bar	Click icons to run menu commands
Display bar	Shows the horizontal (X) and vertical (Y) position of the pointer and the coordinates of objects as you draw or modify them. Also shows the fill and outline colors, current font, and zoom level
Palette	Shows colors you can use for fills and outlines. Click a color to use it. Click the scroll arrows on either side of the palette to show more of the 150 colors
Ruler	Shows the position of pointers or objects for precision drawing. You can set the ruler to inches, centimeters, or points
Page	The printable area marked by a solid line. A dotted line on the page marks the margins set in Page setup . You can print beyond margins
Workspace	The non-printing area around the page
Toolbox	The selection, modification, and drawing tools in Harvard F/X



Notes

- ◆ Choose **Display** on the Options menu to set up the display bar, rulers, and other screen options. See page B-5 “Setting Harvard F/X Preferences.”
- ◆ The display bar above the palette shows a variety of information for precise drawing. The X and Y boxes show the horizontal and vertical position of a pointer, measured from the bottom left corner of the page.
- ◆ As you draw or move objects, the display bar shows size, distance, angle, and text information. For example, if you draw a rectangle, the display bar shows its width and height. If you then drag it, the display bar shows the distance of the move.
- ◆ To change the origin, click the Origin tool and drag the pointer to new coordinates.

Using Rulers

Use rulers to draw or move objects precisely. As you move an object, markers slide on the rulers to show the pointer position. Rulers in the current unit of measure appear along the top and left side of the page.

Harvard F/X Windows and Page Views

You can view your work in either of two modes: preview or outline. Switch to outline mode to view your text and objects without fills, which makes them draw faster on-screen.

To see a full screen view of a drawing, choose **Full screen preview** on the Window menu. To switch views, choose **Preview/outline** on the Window menu.

Using Zoom



Use the Zoom tool to work on details or zoom out to see more of the page. Zooming changes only the view of a drawing, not the actual size or scale of objects. To zoom in, click the left mouse button. To zoom out, click the right mouse button.

You can press Shift and drag the Zoom pointer to enlarge the area you enclose. To quickly scroll the view, drag the Zoom pointer.

Using Quick Zoom

With the Zoom tool selected, you can zoom to either of two Quick zoom levels you set in the Zoom dialog box. Press **Shift** and click the drawing to zoom to the close-up view. Press **Shift** and click with the right mouse button to zoom out.

Setting Harvard F/X Preferences

Click **Display**, **Measurements**, **Guidelines**, or **Preferences** on the Options menu to customize the HF/X workspace and other features.

Using the Grid and Guidelines

The grid and guidelines are non-printing lines that help you draw and move objects precisely. If you display the grid or guidelines, you can use Snap to align objects to the nearest line. The grid is a set of evenly spaced lines; guidelines are placed individually.

To set the grid size:

- 1 Choose **Measurements** on the Options menu.
- 2 Select a unit of measure.
- 3 Under Grid, type the **Horizontal** and **Vertical** distance between grid points and click **OK**.

To add or remove guidelines:

- 1 Choose **Guidelines** on the Options menu or double-click a ruler.
- 2 Select **Horizontal** or **Vertical** axis, and the **Location**, **Number**, and **Spacing** for guidelines and click **OK**.

You can also add a guideline by clicking at a desired point in either ruler, then dragging onto the page.

To show a grid or guidelines:

- 1 Choose **Display** on the Options menu.
- 2 Select **Grid** or **Guidelines** or both and click **OK**.

Using Snap

After you display grid lines or guidelines, use Snap to align objects as you draw or move objects.

- 1 Choose **Snap** on the Options menu, then choose **To grid & guides**.
- 2 Snap by drawing an object starting near a grid line or guideline, or drag an object. The upper left part of the object snaps to the nearest line when you release the mouse.

**Note**

- ◆ With Snap on, the X and Y boxes in the display bar show the coordinates of the nearest grid line or guideline.

Setting up the Printer

- 1 Click **Print setup** on the File menu or in the Print dialog box.
- 2 Select a printer.
- 3 Click **Setup** if you want to adjust options in the Windows printer setup.
- 4 Click **OK**.

**Notes**

- ◆ Harvard F/X prints everything on the page, unless you select one or more objects before printing, then check **Selected objects only** in the Print dialog box.
- ◆ If an object is too complex to print or export, simplify its path. Select it and click **Simplify** from the Arrange menu.

Working with Harvard Montage Lite

Click the Harvard Montage Lite button to open a window containing an album of clip art that you can drag or paste into Harvard F/X. See page 8-5 "Adding Clip Art" for more information.

Using Drawings Elsewhere

When you finish a drawing, save (or update) it. You can use it in another program by:

- ◆ Dragging and dropping
- ◆ Copying and pasting
- ◆ Exporting
- ◆ Inserting it as an embedded object

Use copying and pasting if you started Harvard F/X from the Harvard Graphics program folder or want to use only selected Harvard F/X objects in other programs.

When you use Paste in a container program like Harvard Graphics, you embed the object. See page 7-5 "Linking and Embedding an Object in a Slide (OLE Container)."

To export a drawing:

- 1 Select the objects or select nothing to export the entire page.
- 2 Choose **Export** on the File menu.
- 3 Select a **File type** from the drop-down list.
- 4 Type a filename. If you're exporting **Selected objects only**, select that option.
- 5 Click OK.

Creating Text



- 1 Click the Text tool.
- 2 Drag to create a text box.
- 3 Type your text.

You can also select **Paste** on the Edit menu to place text from the clipboard in the text box.

Selecting Text



To select an entire text block: click the Selection tool, then click anywhere on the text block.



To select individual characters: click the Text tool, then drag over characters you want to change.

Editing Text

Harvard F/X lets you add and delete characters, kern text, or shift characters above or below the baseline. You can change the font, size, and style of text by using the Text menu. Click **All attributes** to see the text attributes dialog box.

Outlining Text

To outline text, select the text and click the active outline color or any palette square with the right mouse button.

Kerning Text

Kerning adds or removes space between characters in fractions of an *em*, defined as the width of a capital M. Some letter pairs benefit more from kerning than others, especially vowels following T, W, Y, and some other capitals. You can kern using the keyboard or globally with the Text Attributes dialog box.

Click the Text tool and click between two characters you want to kern. To kern two or more characters, select all of the characters.

Press:	To:
Alt+Left Arrow	Decrease space by 1/100 em space
Alt+Right Arrow	Increase space by 1/100 em space
Alt+Ctrl+Left Arrow	Decrease space by 1/10 em space
Alt+Ctrl+Right Arrow	Increase space by 1/10 em space

Moving Characters from the Baseline

Baseline is the invisible line that characters rest on. You can shift characters up or down from the baseline using the keyboard or globally with the Text Attributes dialog box.

Press:	To:
Alt+Up Arrow	Shift up 1 point
Alt+Down Arrow	Shift down 1 point
Alt+Ctrl+Up Arrow	Shift up 3 points
Alt+Ctrl+Down Arrow	Shift down 3 points

Shaping Text along Paths

To shape text along a path, draw the path you want text to follow and create the text.

- 1 Select both the text block and the path.
- 2 Choose **Text effects** on the Text menu, then select an option.

Select	To shape along:
Shape to path	Freehand lines, curves, or arcs
Shape between two paths	Two freehand lines or curves
Fit above path	Either curves or lines
Fit below path	Either curves or lines



Notes

- ◆ Text must be horizontal, but it can be more than one line.
- ◆ When you choose **Shape to path**, text is shaped to the path based on its relative position, above or below the path.

Before shaping between two paths, select the text block and then press Shift and click the other two objects until all three items are selected. When you shape between paths, the text resizes to fill the space.

Drawing Objects

Harvard F/X provides a set of drawing tools you can use to draw curves, lines, boxes, circles, and other shapes. With most tools, you can:

- ◆ Draw by dragging. Click a tool, point where you want to begin, then drag to the desired dimensions
- ◆ Draw by clicking beginning and ending points (except for the Freehand tool)
- ◆ Press Ctrl and drag to draw ovals, circles, and boxes from a center point (polygons are always drawn from the center)
- ◆ Double-click a tool to select its attributes in a dialog box. The attributes are saved with the drawing

If Tool Lock is on, a tool remains selected until you select another. To turn on Tool Lock, click **Preferences** on the Options menu.

Drawing Freehand Curves and Lines



Click the Freehand tool to draw freehand curves and lines.

To draw a line with no fill, first click None in the palette. Set the outline color by clicking with the right mouse button.

With the Freehand tool, you draw *open paths*, where the start and end of a line don't intersect. You can close the path of an object by dragging to the precise starting point and releasing the mouse.

You can erase as you draw freehand. Without releasing the mouse button, press Shift and drag backward over the line. Release Shift to continue drawing.

To control the control point density and corner point sensitivity of lines you draw freehand, double-click the Freehand tool and select options in the Freehand Tool dialog box.



Notes

- ◆ Use sparse settings when you want an object's control points spaced far apart. Sparse settings produce paths that are easier to reshape. Use dense settings when you want many closely-spaced control points. A dense setting makes drawing more sensitive to your mouse movements.
- ◆ Use more corners when you want slight changes of mouse direction to produce corner points.

Drawing Curves and Lines



Use the Pen tool to draw smooth curves and lines. With the Pen tool, you place control points to create a path of line and curve segments. You can adjust the segments as you draw.

- 1 Click the Pen tool.
- 2 Click where you want to start the line, then click again where you want the line to continue.

Before releasing the mouse button, you can shape the direction of the line by dragging around the current point. An arrow shows the direction.
- 3 Extend the line by clicking other points and dragging to shape the direction.
- 4 When you finish, you can close the path or keep it open.

For a *closed path*, joining the first and last points, click the first control point. To keep the path open, click the last control point or any other tool.

**Notes**

- ◆ To draw a straight line segment, press **Ctrl** and click a point.
- ◆ To erase a segment before ending the path, click the right mouse button.
- ◆ As you click, Harvard F/X creates smooth points. To connect a segment with a corner point, double-click the point.

Drawing Straight Lines

- 1 Click the Line tool.
- 2 Click where you want to start the line.
- 3 Click where you want the line segment to end.
- 4 To draw a series of connected line segments, click again where you want the next segment to end. Add as many segments as you want.
- 5 To close the path, click the first control point. To keep the path open, click the last control point again, or click any tool.

**Notes**

- ◆ You also can draw a line by dragging the Line tool.
- ◆ Press **Shift** and drag to constrain the drawing or lines at preset angles.
- ◆ To erase a line segment before closing the path, click the right mouse button.

Drawing Arcs

- 1 Click the Arc tool.
- 2 Click where you want to begin the arc.
- 3 Click where you want the center of the arc. A temporary circle appears and a marker shows the center of the circle.
- 4 Click on the temporary circle where you want to end the arc.
- 5 To close the path, click the end point again, or click any tool.

**Notes**

- ◆ Arcs are normally drawn counterclockwise. To draw them clockwise, click the end point as in step 4 above, but drag clockwise from that location before releasing the mouse button.
- ◆ To draw a straight line connected to an arc, press **Ctrl** as you click to end a segment.
- ◆ To draw a series of connected arcs, continue drawing arcs without ending the path. One arc's ending location becomes the start of the next arc.

Drawing Rectangles and Squares



- 1 Click the Rectangle tool.
- 2 Drag to the desired width and height and release the mouse.



Notes

- ◆ You also can draw a rectangle by clicking the beginning and ending points at opposite corners.
- ◆ For a square, press Shift as you drag.
- ◆ Press Ctrl and drag to draw a rectangle from a center point; Ctrl+Shift for a center-point square.

Double-click the Rectangle tool to set round or sharp corners. For right-angle corners, type 0. Type a higher value for rounded corners, based on the unit of measure.

Drawing Ovals and Circles



- 1 Click the Oval tool.
- 2 Drag to the desired width and height and release the mouse.



Notes

- ◆ You also can draw an oval by clicking the beginning and ending points on opposite sides.
- ◆ For a circle, press Shift as you drag.
- ◆ Press Ctrl and drag to draw an oval from a center point; Ctrl+Shift for a center-point circle.

Drawing Polygons

Use the Polygon tool to draw uniform polygons from 3 to 99 sides.



- 1 Click the Polygon tool.
- 2 Drag to the desired size, then release the mouse.



Notes

- ◆ As you drag, you can rotate the object in any direction.
- ◆ Press Shift as you drag to constrain sides to a control angle.

Double-click the Polygon tool to set the number of **Sides** and a **Corner radius**. Type 0 for sharp corners, a higher value for rounded corners, based on the unit of measure. If the corner radius is too big, Harvard F/X uses sharp corners.

Selecting and Moving Objects

Before you work on text or objects, you must select them using a selection or modification tool. *Handles*, *control points*, and a *selection box* normally appear around selected objects. Handles surround a selection box and are larger than control points, which mark the curves or angles of items within the box.

Selecting Objects



- 1 Click the Selection tool.
- 2 Click an object or text block.
- 3 To select more objects, press **Shift** and click them.



Notes

- ◆ You also can select by dragging a selection box around one or more objects.
- ◆ To select all objects, choose **Select all** on the Edit menu.
- ◆ To select only objects with a fill matching one in the palette, press **Shift** and click the matching palette square. To select those with matching outlines, click with the right mouse button. See page B-29 “Using the Palette.”
- ◆ You can’t select locked objects.

Selecting Control Points

Smooth control points link curved segments and appear as circles. Corner points appear as squares. A selected control point is solid.



- 1 Click the Select Points tool.
- 2 Click an object.
- 3 Click a control point.
- 4 To select more points, press **Shift** and click them.



Note

- ◆ You also can select points by dragging a selection box around one or more objects.

Deselecting Objects and Points

To deselect one or more selected objects: click the Selection tool, press **Shift** and click each object to deselect. Or press **Shift** and drag a selection box around the objects to deselect.

To deselect one or more selected control points: click the Select Points tool, press Shift and click each control point to deselect. Or press Shift and drag a selection box around those points.

Pasting Objects

You can paste objects cut or copied from Harvard F/X or other programs. See page B-7 “Using Drawings Elsewhere.” Use **Paste Special** to control how an object is pasted, for example in picture or bitmap format.

Many Windows programs use cut and paste in support of Object Linking and Embedding (OLE). Harvard F/X is an OLE *server* whose objects can be embedded using Paste in an OLE *container* program. See page 7-2 “About DDE and OLE” for more information on OLE.

Duplicating Objects

Duplicating combines copying and pasting into one step.

- 1 Select an object or text block.
- 2 Choose **Duplicate** on the Edit menu. (The copy is selected and appears offset from the original. You can duplicate an object many times.)

Harvard F/X offsets a duplicate according to the grid measurement. For example, if grid coordinates are 1 inch, Harvard F/X offsets each duplicate that amount, above and to the right of the original. See page B-5 “Using the Grid and Guidelines.”

To change the offset, drag a duplicated object the desired distance from the original. Each new duplicate will offset that distance.

Moving to Front or Back

When you create multiple objects, newer objects appear and print on top. You can move overlapping objects ahead or behind others.

- 1 Select the object.
- 2 Click a move command on the Arrange menu.

Locking and Unlocking Objects

You can lock objects so you don't move or change them accidentally.

- 1 Select the objects you want to lock.
- 2 Choose **Lock** on the Arrange menu.

To unlock all locked objects, choose **Unlock** on the Arrange menu.

Grouping and Ungrouping objects

To keep objects in relative position as you move or copy them, use the Group command.



- 1 Click the Selection tool and select all the objects you want in a group.
- 2 Choose **Group** on the Arrange menu or click the button. Choose **Ungroup** or click the button to ungroup objects.



Note

- ◆ To move or change an individual object in a group, drag a selection box around the object, change it, then deselect it. The modified object remains part of the group.

Aligning Objects

You can align objects horizontally and vertically.



- 1 Select the objects.
- 2 Choose **Align** on the Arrange menu or click the Align button.
- 3 Select an option under **Align objects to**.
- 4 Select **Horizontal** and **Vertical** options, then click **OK**.

Resizing and Reshaping Objects

You can change text or objects using these tools:

Tool:	Purpose:
Selection tool	Scale text and objects by maintaining proportions or by scaling one side more than another
Rotate tool	Rotate text or objects around a center point
Skew tool	Slant or keystone objects, including text you first convert to paths
Mirror tool	Create a mirror image of an object, including text you first convert to paths

To display a dialog box that you can use to set precise values and apply changes, double-click a tool. The Selection, Rotate, and Mirror tools reshape objects relative to reference points specific to each tool. You control reference points in the tool dialog boxes.

You can constrain changes to a pre-set angle or proportion by pressing Shift as you drag an object. You can also apply changes to a copy of the original by clicking a handle with the right mouse button.

Resizing Objects

Use the Selection tool to resize an object.

- 1 Select an object or text block.
- 2 Drag a handle in the desired direction. You can better control how you resize an object, using this table for guidance.

To resize:	Press:
Proportionally	Shift and drag
From the center	Ctrl and drag
A copy	The right mouse button



Note

- ◆ When you resize by dragging, the object's outline width doesn't change. To scale the outline, use the Scale dialog box and select **Scale line width**.

Using the Scale Dialog Box

To control scaling more precisely, use the Scale dialog box.

- 1 Select an object or text block and double-click the Selection tool.
- 2 Resize the text or object.

To resize:	Select:
Proportionally	Uniform scaling and type a percent
Line width	Scale line width (Uniform scaling only)
Horizontally only	Nonuniform scaling , type a Horizontal percent and keep Vertical at 100 percent
Vertically only	Nonuniform scaling , keep Horizontal at 100 percent, and type a Vertical percent
Disproportionately	Nonuniform scaling and type Horizontal and Vertical percents.

- 3 Choose the location of the **Fixed point**, from which the resized object shrinks or expands.
- 4 Click OK.

Autotracing Bitmaps

Use Autotracing if you want to use an imported bitmap as the basis of a shape you are creating, such as a company logo. You can move, scale, or print imported bitmaps. To rotate, skew, keystone, or mirror bitmaps, you need to trace them first.



- 1 Click the Autotrace tool.
- 2 Drag a selection box around an imported bitmap or click near a part you want to trace.
- 3 Double-click the Autotrace tool to change the pixel filter.

Harvard F/X traces connected groups of pixels at or above the limit of the pixel filter set in the Autotrace tool dialog box.

If you use the point-and-click method, Harvard F/X traces the nearest group of connected pixels whose colors match.



Note

- ◆ For best results, trace monochrome bitmaps or color bitmaps with simple, well-defined color regions.

Rotating Objects



- 1 Select the text or object.
- 2 Click the Rotate tool.
- 3 Drag a handle in the direction you want to rotate.



Notes

- ◆ To rotate imported bitmaps, trace them first using the Autotrace tool.
- ◆ Rotating an object with a gradient fill doesn't change the gradient fill angle. Use the Gradient fill dialog box to change the gradient angle.

Using the Rotate Dialog Box

- 1 Select the text or object and double-click the Rotate tool.
- 2 Type a rotation **Angle** from 1 and 359 degrees.
- 3 Select the **Center of rotation** and click **OK**.

Converting Text for Reshaping

Before reshaping text with the Skew, Mirror, or Select Points tools described in the following sections, you must first convert the text to paths.

- 1 Select a text block with the Selection tool.
- 2 Choose **Convert to paths** on the Text menu.

Characters you convert to paths becomes objects, made up of multiple line segments and control points. After conversion, you no longer can edit the characters as standard text.

Skewing and Keystoning

You *skew* objects by slanting them or *keystone* them by reshaping one side while keeping the other the same.

- 1 Select an object.
- 2 Click the Skew tool.
- 3 Drag a middle handle to skew an object in the desired direction. Or drag a corner handle to keystone.



Note

- ◆ To skew or keystone imported bitmaps, first trace them first using the Autotrace tool.

Using the Skew Tool Dialog Box

- 1 Select an object and double-click the Skew tool.
- 2 Type a skew **Angle** from between 86 and -86 degrees, measured counterclockwise from the horizontal axis.
- 3 To skew horizontally, select **Top edge**. To skew vertically, select **Right edge**.
- 4 Click OK.

Mirroring

- 1 Select the object.
- 2 Click the Mirror tool.
- 3 Click a handle.



To mirror:

Click:

From the side

A side handle

Diagonally

A corner handle

From the center

Press **Ctrl** and click any handle

A copy

Any handle with the right mouse button

**Note**

- ◆ To mirror imported bitmaps, first trace them using the Autotrace tool.

Using the Mirror Tool Dialog Box

- 1 Select an object and double-click the Mirror tool.
- 2 Type a mirror **Angle** from between 1 and 359 degrees.
- 3 Select the **Mirror point** and click **OK**.

Reshaping Text and Objects

When you resize, rotate, skew, or mirror an object, you work on the whole object. When you reshape an object, you change only a part of the object. You can reshape an object by moving control points, moving segments, and changing curves.

Moving Control Points

- 1 Click the Select Points tool and select an object.
- 2 Select a control point and drag it in any direction.

As you drag the point, the segments connected to it stretch or shrink to follow the point.

**Notes**

- ◆ To move control points precisely, select the control point and press any arrow key.
- ◆ If you move multiple control points, the points maintain their relative position.

Moving Segments

You can reshape an object by moving its *segments*, which are the lines and curves between control points.

- 1 Click the Select Points tool and select an object.
- 2 Drag a segment.

Changing Curves

Curves and arcs use Bezier handles to help you reshape objects. When you select a curve or arc segment, a Bezier handle appears as an extension of each control point.

Moving Curve Segments

- 1 Click the Select Points tool and select a curve.
- 2 Drag the end of a handle or the segment between two control points.
As you drag, the curve segment stretches and moves to follow the handle.



Notes

- ◆ If a smooth point connects two curve segments, the Bezier handles at that point move together.
- ◆ If the point is a corner point, the Bezier handles move independently. Changing the direction of one handle doesn't move another.
- ◆ You can edit points or segments by double-clicking them to display the Edit Points or Edit Segments dialog boxes.

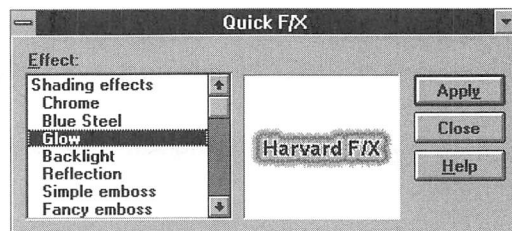
Using Quick F/X

After creating text or objects, or importing bitmaps, you can apply one of the 35 Quick F/X. Quick F/X include circular and glowing text; swept and shadowed text and objects; and bitmap artwork mottled with mosaic, frosted, rain on glass and other textures.

Quick F/X are sorted by categories for text, objects, and bitmaps in the Quick F/X dialog box.



- 1 Select the text or object, then choose **Quick F/X** on the Effects menu or click the Quick F/X button.
- 2 Select a quick effect, then click **Apply**.



Quick F/X for Bitmaps

Before applying textured Quick F/X to a bitmap, you must first import and select it.

Importing Bitmaps



- 1 Click **Import** on the File menu or click the Import button.
- 2 Select a file type and a filename, then click **OK**. The bitmap is placed in the center of the screen and remains selected.



Notes

- ◆ Bitmaps include .BMP, .PCX, .TIF, and .GIF files, but not line art, such as .EPS or .AI formats.
- ◆ After you import bitmaps, you can apply bitmap Quick F/X while they're in a bitmapped format.
- ◆ To convert the bitmaps to Harvard F/X objects, trace them using the Autotrace tool. After tracing, you can apply standard Quick F/X to the objects. See page B-16 "Autotracing Bitmaps."

Converting Clip Art to Bitmaps

To apply Quick F/X to clip art in Harvard Montage Lite:



- 1 Choose **Harvard Montage Lite** on the Harvard F/X File menu, or click the Harvard Montage Lite button.
- 2 Copy a clip art image to the Harvard F/X drawing, select the clip art, and choose **Export** on the File menu.
- 3 In the dialog box, click **Selected objects only**, select a file type, type a filename, then click **OK**.

You now can import the clip art bitmap.

Applying Bitmap Quick F/X



- 1 Select a bitmap and choose **Quick F/X** on the Effects menu or click the Quick F/X icon.
- 2 Scroll to the Bitmap effects at the bottom of the list, select an effect and click **Apply**.
- 3 If you don't like the results, choose **Undo** on the Edit menu and try another effect.
- 4 When you finish, click **Close**.



Note

- ◆ In addition to using Quick F/X for bitmaps, you can trace bitmaps using the Autotrace tool to convert the bitmaps to Harvard F/X objects. After tracing, you can apply standard Quick F/X to the objects. See page B-16 "Autotracing Bitmaps."

Extruding

Extruding applies a three-dimensional depth to text and objects. There are two kinds of extrusion: *parallel*, where edges are side-by-side, and *perspective*, where edges converge to a vanishing point.



Note

- ◆ To reduce drawing and printing time, remove the sides covered by the extruded part of the object. Select **Remove hidden sides** in the Extrude dialog box.

Using Parallel Extrusion

- 1 Select an object or text block.
- 2 Choose **Extrude** on the Effects menu.
- 3 Click **Parallel**. An extrusion box surrounds the object, connected to parallel extrusion lines and the extrusion rectangle in back.
- 4 Drag the extrusion rectangle in any direction or type the **Angle** and **Depth** in the dialog box.
- 5 When you finish, click **Close**.

Using Perspective Extrusion

- 1 Select an object or text block.
- 2 Choose **Extrude** on the Effects menu.
- 3 Click **Perspective**. Harvard F/X displays the extrusion box and extrusion rectangle. A crosshairs vanishing point marks where extrusion lines converge.
- 4 Drag the vanishing point in any direction, or type horizontal and vertical **Vanishing point** coordinates in the dialog box.
- 5 Drag the extrusion rectangle to or from the vanishing point, or type the **Depth** in the dialog box. Depth is the distance between the object and the extrusion rectangle. The angle is measured counterclockwise from the object to the rectangle.
- 6 When you finish, click **Close**.

Shading Extruded Objects

You can shade extruded objects by controlling the light source and other settings. The part of the object facing the light source appears lightest.

- 1 Select an object or text block and choose **Extrude** on the Effects menu.
- 2 Click **More**.

The sun symbol represents the position of the light source.

- 3 Drag the sun to a new location, or type the **Light source angle** in the dialog box.
- 4 Click **Apply** to see the effect, then make any other adjustments.
- 5 Click **Close** when you finish.

Warping

Use warp to distort and reshape objects.

- 1 Select the text or object.
- 2 Choose **Warp** on the Effects menu.
- 3 Select the type of warp.

To:	Do this:
Add warp	Choose Add . Drag a control point
Remove warp	Choose Remove
Make warp permanent	Select a warped object and choose Permanent . Permanent warp converts text to paths
Copy/Paste warp	Select a warped object and choose Copy warp . Select another object and choose Paste warp .

Creating Perspective

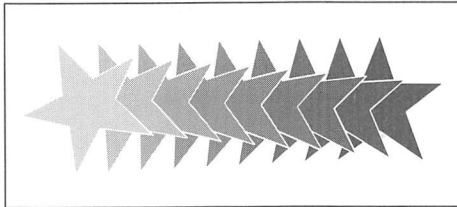
Perspective gives the illusion of distance to text or objects.

- 1 Select the text or object.
- 2 Choose **Perspective** on the Effects menu.
- 3 Select a perspective option.

To:	Do this:
Add perspective	Choose Add . Drag a control point
Remove perspective	Choose Remove
Make perspective permanent	Select an object with perspective and choose Permanent . Permanent perspective converts text to paths
Copy/Paste perspective	Select an object with perspective and choose Copy perspective . Then select another object and choose Paste perspective .

Blending and Copying Objects

Blending transforms the shapes and colors of two objects. The blend begins with the object at the top of the drawing order. You can blend any objects that haven't been grouped or combined. You can't blend text or bitmaps. You can move or change any object drawn between the two objects in the blend.



- 1 Select two objects.
- 2 Choose **Blend two paths** on the Effects menu.
- 3 Type the **Number** of steps you want between the objects. The greater the number of steps, the smoother the blend.
- 4 Type values for **Start color blend** and **End color blend**. This marks where to begin the switch from one color to the next. For smoother blends, start with 1 and end with the number matching the number of steps.
- 5 To outline the steps between objects, select **Also blend line**.
- 6 For a rainbow effect, select **Blend by hue**. Otherwise, the program blends just the two colors.
- 7 Click **OK**.

Making Linear Copies

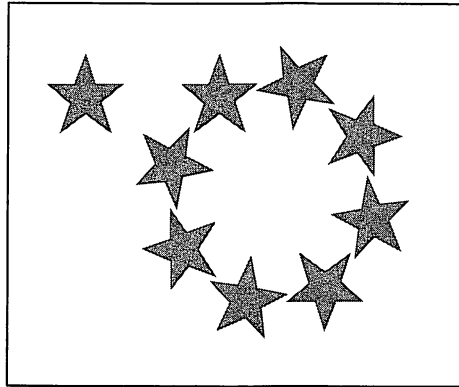
Linear copies are duplicates made in a straight line in any direction.

- 1 Select an object.
- 2 Choose **Linear copy** on the Effects menu.
- 3 Type the **Total number** of objects, including the original, from 2 to 999.
- 4 Select **Relative** or **Polar** spacing, marking the distance from a point on an object to the corresponding point on the next object. Relative spacing uses horizontal and vertical distances. Polar spacing uses a distance and an angle.
- 5 For Relative spacing, type the **Horizontal** and **Vertical** distances. Type negative numbers to copy to the left of or below the main object. For Polar spacing, set the **Distance** for spacing and the **Angle** at which to paste copies, from 1 to 359 degrees.

- 5 For Relative spacing, type the **Horizontal** and **Vertical** distances. Type negative numbers to copy to the left of or below the main object. For Polar spacing, set the **Distance** for spacing and the **Angle** at which to paste copies, from 1 to 359 degrees.
- 6 Click **OK**.

Making Circular Copies

Circular copies are objects copied around a center of rotation you set.



You can rotate a circular copy from the last point, as shown, or from precise coordinates

- 1 Select an object.
- 2 Choose **Circular copy** on the Effects menu.
- 3 Type the **Total number** of objects, including the original.
- 4 Set a **Center of rotation**. For the most recent point on the page, click **At last point**. To set the exact location, select **At** and type **Horizontal** and **Vertical** coordinates.
- 5 Click **OK**.

Making Rectangular Copies

Rectangular copies are useful to create checkerboard effects.

- 1 Click the Selection tool and select an object.
- 2 Choose **Rectangular copy** on the Effects menu.
- 3 Type the **Number** of horizontal **Rows** and vertical **Columns** for copies.
- 4 Type a number for **Spacing** and click **OK**. The spacing is the distance from a point on an object to the corresponding point on the next object. If spacing is less than the size of the main object, copies will overlap. To paste copies to the left of or below the main object, type negative numbers.

Pasting Copies on a Path

You can paste copies on each control point of an object.

- 1 Copy an object.
- 2 Select the path where you want to paste the copies.
- 3 Choose **Paste on path** on the Effects menu. A copy of the object appears centered on each of the path's control points.

Combining Objects

Combine objects when you want them to share the same fill and outline attributes or when you want to make a hole by removing some portion of an object. Combining objects produces one object that uses the fill, outline, and other attributes of the object deepest in the drawing order. This differs from grouping where objects keep their own attributes.

If objects overlap, the area of the overlap is cut away. To cut a hole, draw a smaller object over a larger one, then combine them.

- 1 Click the Selection tool and select the objects.
- 2 Choose **Combine** on the Arrange menu.

Breaking Apart

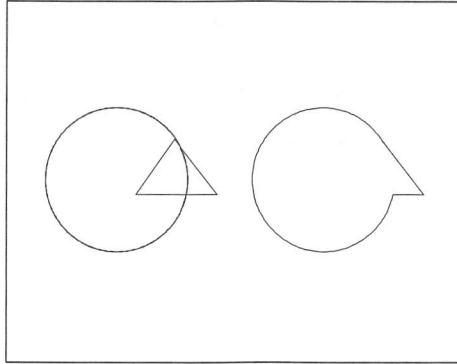
When you break apart combined objects, each object becomes an individual path, but use the fill and outline of the combined version.

- 1 Select the combined object.
- 2 Choose **Break apart** on the Arrange menu.

Melding paths

Melding is useful for making multiple objects into one. When you meld paths, Harvard F/X creates a new, closed path from the union of the paths. The new object uses the attributes of the object at the top of the drawing order.

- 1 Select two or more objects.
- 2 Choose **Paths effects** on the Effects menu, then choose **Meld**.

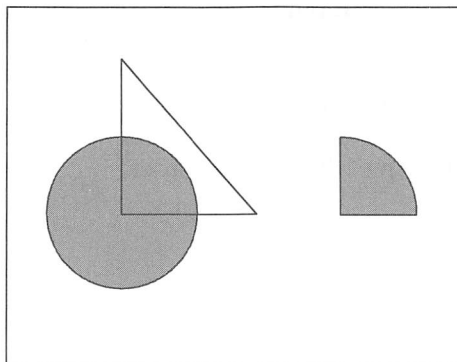


With melding, multiple objects are merged as one

Intersecting Paths

Intersecting paths, creates a new object with the shape of the intersection of the paths. The new object uses the attributes of the object deepest in the drawing order. Intersecting is useful for removing parts of a drawing.

- 1 Click the Selection tool and select two objects.
- 2 Choose **Path effects** on the Effects menu, then choose **Intersect**.

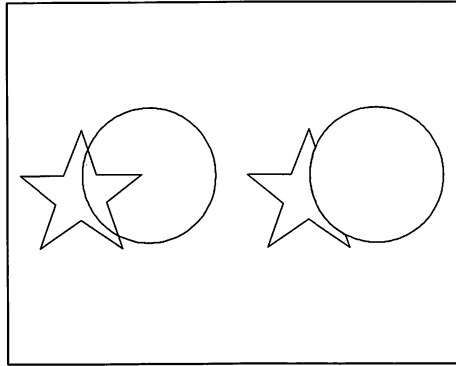


With intersecting, a new object is created from the overlapping points of two objects

Subtracting Paths

If two objects overlap, you can subtract whatever is beneath an overlapping object. The shape and position of the object at the top of the drawing order determines what is subtracted. You can use the subtract feature to cut holes in objects.

- 1 Click the Selection tool and select two overlapping objects.
- 2 Choose **Path effects** on the Effects menu, then choose **Subtract**.

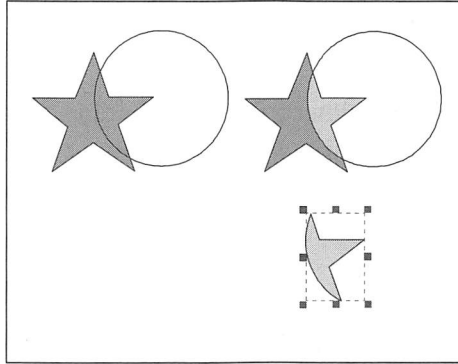


Anything beneath the overlap is subtracted. Drag the remaining objects to see the effect

Punching Paths

If you *punch* overlapping objects, Harvard F/X cuts the intersection of the paths away from the objects, like using a hammer and punch tool in craftwork. The punched intersection becomes another object. If you punch three or more overlapping objects, the intersected object takes the attributes of the one deepest in the drawing order. Otherwise, it uses attributes of the object at the top of the drawing order.

- 1 Click the Selection tool and select two or more objects.
- 2 Choose **Path effects** on the Effects menu, then choose **Punch**.



You can see the result of the punch by dragging the overlapping object to a new position

Using Color and Patterns

Harvard F/X includes colors and patterns to use in fills and outlines for text and objects. You can select colors from any of 12 palettes, each with 150 colors styled and arranged for common kinds of work. You can choose from a set of 69 named colors on the Color menu or create your own colors and palettes.

All objects can have both a *fill* and *outline*. The fill is the color or pattern within an object's borders. The outline defines an object's outside edge and is also used for lines you draw with line tools.

Using the Palette

Using the Harvard F/X palette you can quickly select an object's fill and outline.



Click a scroll arrow to see more of the 150 palette color squares

Setting Fills and Outlines with the Palette

- 1 Select an object.
- 2 To change the fill, click a color in the palette. To change the outline, click with the right mouse button.



Notes

- ◆ Objects with neither a fill nor an outline are transparent.
- ◆ To turn off the fill or outline, click the blank, dashed box on the left side of the palette (None). White is opaque and produces a different result than using no fill or outline.

Getting a Palette

When you start Harvard F/X, it displays the palette you used most recently. If you open a drawing, it displays the palette saved with the file. Use the current palette, switch to another one, or create your own.

- 1 Choose **Palette** on the Options menu, then choose **Get**.
- 2 Select a palette from the list and click **OK**.

Editing a Palette

If colors or patterns you use are scattered across the palette (or unavailable), you can move (or add) colors to avoid scrolling.

- 1 Select an object and fill it with a color or pattern you want to put on the palette.
- 2 Scroll the palette to a color you want to replace.
- 3 Press **Ctrl+Shift** and click the palette square you want to replace.

Saving a Palette

- 1 Choose **Palette** on the Options menu, then choose **Save**.
- 2 Type a filename for the palette and click **OK**.



Notes

- ◆ To create an entirely new palette, first get the BLANK.HDP palette.
- ◆ You can quickly mix a color by pressing **Ctrl** and clicking the palette square you want to replace. See page B-29 "Using the Palette" to learn about mixing colors.

Using the Color Menu

The Color menu gives you more fill and outline options than the palette. With the Color menu, you can:

- ◆ Select from a variety of fill and outline colors and patterns
- ◆ Set the style and width of lines
- ◆ Match and apply attributes
- ◆ Create patterns

Many Color menu commands are the same for both fills and outlines. However, fills support patterns and gradient and radial fills; lines support a more extensive set of textures.

Using Named Colors

Harvard F/X provides a set of 69 named colors; you can also create your own colors.

- 1 Choose **Fill** or **Line** on the Color menu, then choose **Named**.
- 2 Select the color and click **OK**.

Sorting Named Colors

To sort named colors either by position in the color spectrum or alphabetically, choose **Sort by hue** or **Sort by name** on the Named Color Edit menu.

Creating your own Color Sets

- 1 Open the color set you want to work in.
To work in a set other than the current one, choose **Open** on the Named Colors File menu, select a color set, and click **OK**. Choose **New** to start with a blank color set.
- 2 Choose **Add** on the Named Colors Edit menu, or remix an existing color by selecting one and choosing **Mix**.
- 3 Use the Mix Colors dialog box to save the color with a unique name. See page B-35 "Mixing Colors." Repeat for other colors you want to mix, then save the color set by choosing **Save as** on the Named Colors File menu.
- 4 Select a file type. Harvard F/X adds an .HDC extension for compressed format or .CLR for any of the color model formats, which you can view and print as text files.
- 5 Type a filename and an optional description and click **OK**.

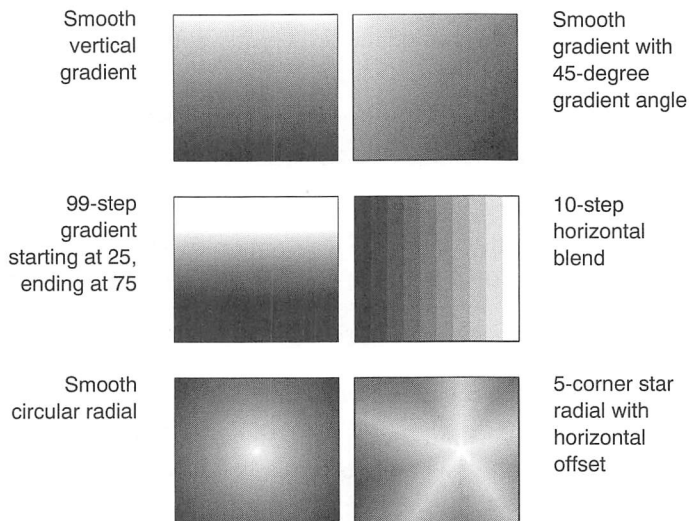


Notes

- ◆ If you add a color to the set of Named Colors, Harvard F/X inserts it after the current one.
- ◆ To remove a color, select it, then choose **Delete** on the Named Colors Edit menu.
- ◆ To overwrite the current color set file, choose **Save** on the Named Colors File menu.

Using Gradient and Radial Fills

Gradient and *radial* fills add shadows and depth to objects. A gradient fill blends color from one side to another; a radial fill blends from the outside in.



If you set up gradient radial fills, the settings are applied to selected objects and new text and objects.

- 1 Choose **Fill** on the Color menu, then click **Gradient** or **Radial**.
- 2 For a gradient fill, select colors for **Color 1** and **Color 2**. For a radial fill, click the **Edge** color and **Center** color.
- 3 Click **Blend by hue** to blend with a rainbow effect. Otherwise, Harvard F/X blends just the two colors.
- 4 To use another angle, drag the handle in the sample box. Or type an angle value. The default angle for a gradient blend is 90 degrees.

- 5 To offset a radial fill, drag the circle in the sample box or click **More** and type percent for the offset. Negative numbers move the offset down and to the left.
- 6 To change the fill shape of a radial blend, click the drop-down list and select a shape.
- 7 Click **OK**.

Using Stepped Gradient and Radial Fills

Gradient and radial fills are either *smooth* or *stepped*. The default, smooth fill, uses as many steps as necessary for a subtle blend. Stepped fills are coarser, but draw and print faster. For stepped fills, you set the number of steps and the start and end points of the color change.

- 1 Choose **Fill** on the Color menu, then choose **Gradient** or **Radial**.
- 2 Click **More**.
- 3 Under Blend type, click **Stepped**.
- 4 Under Blend steps, type the number of steps between colors and the start and end color blend points and click **OK**.

Using Textures

Harvard F/X includes a library of textures, one set for fills and another set for lines. Textures make unique fills, and you can use them as outlines and borders, or as the style for lines you draw.

- 1 Choose **Fill** or **Line** on the Color menu, then choose **Textured**.
- 2 Set the mixed or named color for the line.
- 3 Select a texture **Style**.
- 4 Choose **More** to customize the texture, using the controls, which vary with styles. Select a line style other than Neon to use the More button.
- 5 For fills, align the texture with the path (object) or page. Aligned to the page, the texture appears fixed, regardless of the placement of the objects it fills.
- 6 Click **OK**.

Setting Line Attributes

To set the line style:

- 1 Choose **Line style** on the Color menu.
- 2 Select a line style or choose **Other**.
- 3 For a custom line style, type the length for the first segment in the first **Line** box.

- 4 In the first **Space** box, type the length for the space between the first and second segments.
- 5 Click the next **Line** or **Space** box to see the sample line at the top of the dialog box.
- 6 Continue typing lengths in the **Line** and **Space** boxes until the line has the desired appearance.
- 7 Click **OK**.

To set the line width:

- 1 Choose **Line width** on the Color menu.
- 2 Select a line width or choose **Other**.
- 3 For a custom line width, type or select the size you want.
- 4 Click **OK**.

Selecting All Line and Fill Attributes

- 1 Choose **All Attributes** on the Color menu.
- 2 Set the fill and line attributes.
- 3 Click **More** to set line-ending options.

Item:	Description:
End caps	Select a flush, round, or square cap
Join	Select a miter, round, or bevel join
Start/End	Select arrowheads for the beginning and end of lines.

- 4 Click **OK**.



Notes

- ◆ The **Match** button makes a selected object's current fill and outline attributes the active settings. If you select multiple objects, Harvard F/X uses only attributes common to all objects.
- ◆ To display the Line and Fill Attributes dialog box and match attributes, double-click an object.

Mixing Colors

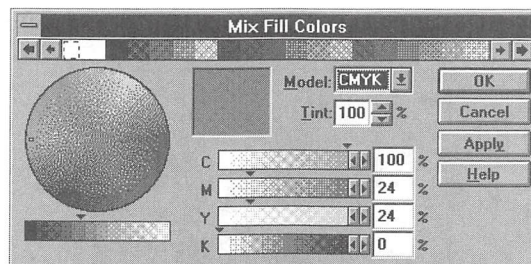
You can mix colors using any of four color models: RGB, CMYK, HSL, and HSV.

- 1 Choose **Fill** or **Line** on the Color menu, then choose **Mix**.
- 2 Click the Model list and select a color model.

Model:	Description:
RGB	Uses red, green, and blue. Zero percent of each color makes black; 100 percent of each makes white. Combinations make other colors. For example, yellow is 100 percent of red and green and zero blue.
CMYK	Uses cyan, magenta, yellow, and black. Zero percent of each color makes white; 100 percent of each makes black. CMYK reflects what you see when mixing pigments, such as paint or ink.
HSL	Produces color by changing hue, saturation, and lightness. Hue is the color itself. Saturation is the amount of color. Colors with low saturation are more pastel or gray. At zero saturation, you only can mix shades of gray. Lightness ranges from black (zero) to white (100 percent). For most vivid colors in HSL, set saturation to 100 percent and lightness to 50 percent.
HSV	Produces color by changing hue, saturation, and value. Use hue and saturation in the same way as with HSL. Value controls intensity of mixed colors. Value ranges from black (zero) to highest intensity (100 percent). For most vivid colors in HSV, set saturation and value to 100 percent.

- 3 Mix the color using one of the following methods.

As you work, the sample box shows the new color. The old color is in the upper left corner, while the new color fills the rest of the box.



The Mix dialog box includes a palette, color wheel, and mixers

To use the palette. Select a color from the palette at the top of the dialog box. The mixers change to display the components of the new color.

To adjust the color more precisely, move the mixer color sliders or type percent. The color replaces the former one on the workscreen palette.

To use the color wheel. Click the color wheel to select a color. Click toward the edge for a more vivid color, toward the center for more pastel. To adjust lightness, click the bar below the wheel, toward the right to lighten the color. The mixers show the color components, which you can refer to for precise adjustments.

To use color mixers. Move the sliders or type percent.

- 4 Click OK.



Note

- ◆ If you choose the CMYK color model, a Tint box appears. Adjust the tint to control the amount of white. A 10 percent tint produces a color that is 10 percent mixed color and 90 percent white; 100 percent tint produces a color with no white.

Using Patterns

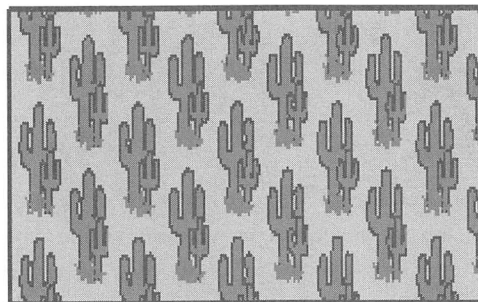
You can fill objects with patterns, including those in the Harvard F/X library or others you can create.

- 1 Choose **Fill** on the Color menu, then choose **Pattern**.
- 2 Choose **Library**.
- 3 Select a pattern file and click **OK**.

A pattern matrix appears beside the main window.

- 4 Click a pattern.

On the drawing page, any selected objects use the pattern fill. To apply it to other objects, select the objects and click the active fill on the display bar.



Harvard F/X includes 150 patterns in its library, including geometric shapes to fill objects and text

Setting Pattern Offset and Alignment

You can control the offset of a pattern that fills an object and how the pattern aligns with objects with the same pattern fill on the page. When you use **Align with path**, the pattern moves with the object in position. When you use **Align with page** and move, the object moves, but the pattern stays in alignment with matching pattern fills. Use **Align with page** when you fill several objects with patterns you want aligned.

- 1 Select an object filled with a pattern.
- 2 Choose **Fill** on the Color menu, then choose **Pattern**.
- 3 Type values for the **Horizontal** and **Vertical** offset.
- 4 Click **Align with path** or **Align with page**, then click **OK**.

Creating a Pattern

You can apply a pattern using two techniques:

- ◆ Draw a pattern and apply it to objects in the same drawing
- ◆ Draw and save a pattern then apply the pattern to selected objects.

The technique for drawing patterns is the same regardless of how you want to apply it.



Note

- ◆ To save a pattern for later use, choose **Save as** on the File menu. Change to the \HFX\PATTERNS directory to save it with other pattern files.

Drawing a Pattern

You can create a pattern from a variety of objects or bitmaps. You can't use objects that contain plain text, other patterns, textures, gradients, or radials. To use text, first convert the text to paths.

As you draw a pattern, choose **Preview/outline** on the Window menu to switch to outline mode, where the tiling rectangle is easier to see in relation to the rest of the pattern. Switch back to preview mode after making adjustments.

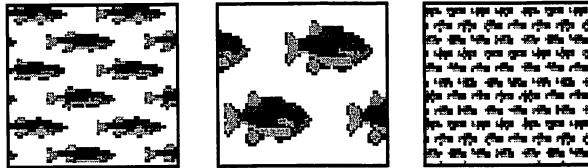
- 1 Design your pattern by drawing, sizing, coloring, and arranging the squares, circles, or other objects you want in the pattern.
- 2 Draw a rectangle around the objects to define one repetition of the pattern. This is considered a tiling rectangle, as described in the next section, "Setting pattern spacing."
- 3 Set the fill and outline of the tiling rectangle to **None**, so the rectangle becomes invisible.

- 4 Select all objects in the pattern, including the tiling rectangle. To select multiple objects, press **Shift** and click.
- 5 Choose **Create pattern** on the Color menu.
- 6 Apply the pattern to objects in the drawing, or save the pattern for later use.

Setting Pattern Spacing

To set pattern spacing, size the tiling rectangle around the pattern's objects, placing it to get the desired balance of blank space and pattern.

A rectangle much larger than the pattern makes the pattern more open; a rectangle smaller than the pattern creates overlap.



Use spacing and proportion controls to get the desired pattern effect

Changing Pattern Spacing

After applying a pattern, you can change the spacing by adjusting the tile size in the Pattern dialog box.

- 1 Select an object filled with a pattern.
- 2 Choose **Fill** on the Color menu, then choose **Pattern**.
- 3 Under **Tile size**, type a new **Height**.
- 4 To change the rectangle's proportions, turn off **Constrain proportions** and type a new **Width**. If **Constrain proportions** is checked, Harvard F/X changes the **Width** so the tiling rectangle maintains its proportions.
- 5 Click **OK**.

Applying a Pattern without Saving It

- 1 Draw and select the objects you want to use as the pattern.
- 2 Choose **Create pattern** on the Color menu. The pattern becomes the active fill, shown in the display bar.
- 3 Select the object you want the pattern to fill.
- 4 Click the fill box on the left side of the display bar.






Harvard F/X Quick Reference

Icons








File

-  Open
-  Save
-  Print
-  Import
-  Harvard Montage Lite


Edit

-  Undo
-  Redo
-  Cut
-  Copy
-  Paste

Arrange

-  Group
-  Ungroup
-  Align objects
-  Move to front
-  Move to back
-  Move forward by one
-  Move backward by one




Utility

-  Quick F/X
-  Start Harvard Graphics for Windows









Tools

(Double-click a tool to show its dialog box)




Select or edit

-  Select, move, or scale objects
-  Select, move, or edit points
-  Autotrace imported bitmaps

Draw

-  Type/edit text
-  Draw freehand shapes
-  Draw curves and lines
-  Draw straight lines
-  Draw arcs
-  Draw rectangle/square
-  Draw ellipse/circle
-  Draw regular polygons

Modify

-  Rotate objects
-  Skew or keystone objects
-  Mirror objects

View

-  Zoom in or out

Speed keys

(For more speed keys, see the **Keyboard** topic in Harvard F/X Help)

- | | |
|----------------------------------------|--------|
| Full-screen preview | F2 |
| Snap to grid or guides | F3 |
| Turn off Snap | F4 |
| Preview/outline mode | F9 |
| Begin new drawing | Ctrl+N |
| Select all objects | Ctrl+A |
| Duplicate the selection | Ctrl+D |
| Set line and fill attributes | Ctrl+E |
| Match line and fill of selected object | Ctrl+M |
| Apply line and fill to selected object | Ctrl+Y |
| Set text attributes | Ctrl+T |

Get Help at any time

Press F1

Choose items from the Help menu

Click the Help button in a dialog box

Press Shift+F1 at the workscreen, then click an item on-screen

Check the title/status bar for information

Palette

Click a palette square to set the fill color

Click with the right mouse button to set the outline color

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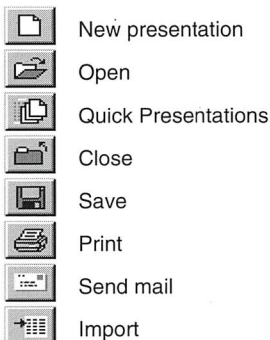
1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

The following information was obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of California:

Standard Toolbar Buttons

To add or delete buttons, choose **Customize Standard Toolbar** from the Tools menu.

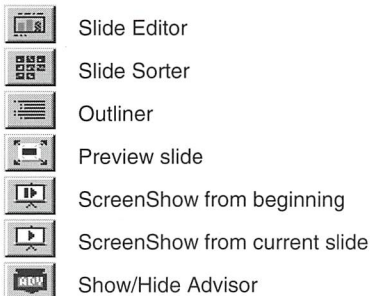
File



Edit



View



Zoom in



Zoom out

Style



Select presentation style



Edit color palette

Slide



Add slide



Delete slide



Add titles/footnote



Edit ScreenShow effects



Add sound



Add/Edit HyperShow button



Autobuild



Edit speaker notes

Chart



Data Form



Chart attributes



Add chart to slide



Add organization chart in Outliner

Outline



Show subtitle/footnote



Hide subtitle/footnote



Indent (demote)



Unindent (promote)

Graphics



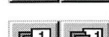
Group



Ungroup



Move to front or back



Move to front or back one position at a time



Special effects



Rotate



Flip horizontally



Flip vertically



Align objects



Edit object



Harvard Montage Lite

Tools



Ruler/Grid



Check spelling



Start conference



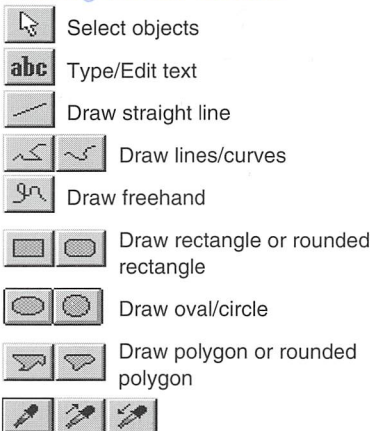
Join conference

Harvard F/X



Start Harvard F/X

Drawing Toolbar Buttons



Copy/paste attributes

Attributes Toolbar Buttons



Bold



Italic



Underline



Superscript/subscript



Left align text



Center text



Right align text



Full align text



Increase/decrease line and paragraph spacing



Text attributes



Line attributes



Graphics attributes